

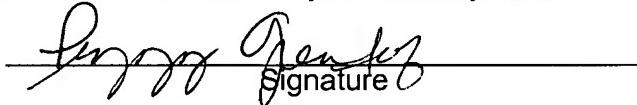
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Robert Lee and Jeffrey T. Haley and Angelina Ople
Title of Invention: THIN MAGNETIC MEDIUM READ HEAD
Application Number: TBD
Filing Date: TBD
Group Art Unit: TBD
Attorney Dkt. No.: 2366-2-3

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this communication, and any document being attached hereto, is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to: Mail Stop Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria VA, 22313-1450 on this 10th day of February 2006.


Signature

**PETITION PURSUANT TO 37 C.F.R. § 1.47(a) TO MAKE PATENT APPLICATION
FOR A JOINT INVENTOR WHO REFUSES TO JOIN IN THE APPLICATION FOR
PATENT**

02/17/2006 GFREY1 00000070 10568097

07 FC:1464 130.00 OP

Commissioner for Patents
Mail Stop Petitions
P.O. Box 1450
Alexandria VA, 22313-1450

Dear Commissioner:

Messrs. Robert Lee and Jeffrey T. Haley respectfully petition under 37 CFR §1.47(a) to make the above referenced patent application on behalf of themselves and Ms. Angelina Ople. Ms. Ople is a joint inventor with Messrs. Lee and Haley,

BEST AVAILABLE COPY

and refuses to join Messrs. Lee and Haley in the application for patent. The appropriate fee pursuant to 37 CFR §1.17(h) is submitted with this petition.

1. On 25 May 2000, Mr. Haley of Graybeal Jackson Haley LLP filed a patent application with the United States Patent and Trademark Office (USPTO) under the Patent Cooperation Treaty (PCT) for UTM Systems Corp. (UTM). The patent application was titled THIN MAGNETIC MEDIUM READ HEAD, and received an application number, PCT/US00/14449. The application PCT/US00/14449 names the following inventors: Messrs. Robert Lee and Jeffrey T. Haley, and Ms. Angelina Ople. A copy of the application PCT/US00/14449, as published by the World Intellectual Property Organization and identified as WO 00/74040 A1, is attached as Exhibit A. The first page of WO 00/74040 lists the filing date, application number and inventors.
2. Before the expiration of the 30-month deadline to enter the PCT application into the U.S. National Stage under 35 U.S.C. 371, some of UTM's creditors initiated a bankruptcy proceeding against UTM. Because of the bankruptcy proceeding, the 30-month deadline expired before UTM completed entry of the PCT application into the U.S. National Stage. A petition for the revival of the U.S. National Stage patent application has been filed and is currently pending. A copy of the petition to revive the National Stage patent application is attached as Exhibit B.
3. On 24 March 2005 (after the 30-month deadline expired), Graybeal Jackson Haley LLP requested relief from the bankruptcy Court's suspension of all debt collection efforts against UTM and its property to foreclose on the PCT application. A copy of the Motion For Relief from Stay is attached as Exhibit C. On 28 April 2005, the bankruptcy Court granted Graybeal Jackson Haley LLP's request for relief. A copy of the Order is attached as exhibit D. Then, on 30 May 2005 Graybeal Jackson Haley LLP concluded foreclosure proceedings on the PCT application and obtained ownership of the application.

4. On 10 October 2005 via email, Ms. Ople was requested to join in the revival of the National Stage patent application, and was presented a copy of the application PCT/US00/14449 and a declaration for her signature to complete the revival. A copy of the email from Mr. John Janeway (attorney for Graybeal Jackson Haley LLP) to Ms. Ople and the declaration attached to the email are attached as Exhibit E. A copy of the application PCT/US00/14449, as published by the World Intellectual Property Organization and identified as WO 00/74040 A1, that was attached to the email dated 10 October 2005 is attached as Exhibit A, which was introduced in paragraph 1. The National Stage patent application is a copy of the application PCT/US00/14449.

5. On 07 November 2005 via telephone, Mr. Mark Ople stated to Mr. Janeway that Ms. Ople refused to sign the declaration shown in exhibit C. A copy of Mr. Janeway's declaration is attached as Exhibit F. Thus, Ms. Ople refuses to join in the revival of the National Stage patent application. Mr. Mark Ople also informed Mr. Janeway that Mr. Ople is Ms. Ople's son, that he is an attorney, and that Ms. Ople received Mr. Janeway's 10 October 2005 email to Ms. Ople.

6. Ms. Ople's last known address is:

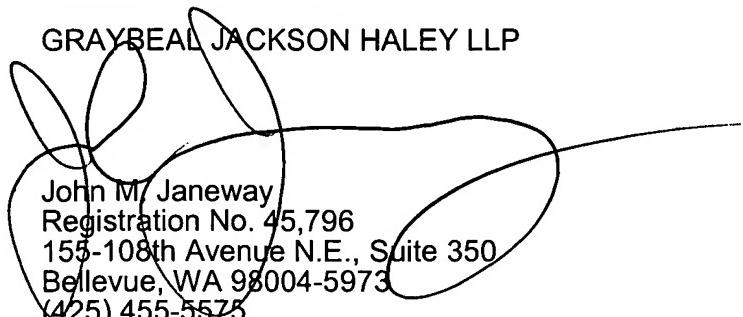
1338 Alcyon Ct
Carlsbad CA 92009

7. Because Ms. Angelina Ople refuses to join in the revival of the above-referenced National Stage patent application, Messrs. Lee and Haley respectfully petition under 37 CFR §1.47(a) to make the National Stage patent application on behalf of themselves and Ms. Angelina Ople.

Dated this 10th Day of February 2006.

Respectfully submitted,

GRAYBEAL JACKSON HALEY LLP



John M. Janeway
Registration No. 45,796
155-108th Avenue N.E., Suite 350
Bellevue, WA 98004-5973
(425) 455-5575

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

**(19) World Intellectual Property Organization
International Bureau**



A standard linear barcode is located at the bottom of the page, spanning most of the width.

(43) International Publication Date
7 December 2000 (07.12.2000)

PCT

(10) International Publication Number
WO 00/74040 A1

(S1) International Patent Classification⁷: G11B 5/147 (74) Agents: VILLANI, Christopher, B. et al.; Graybeal Jackson Haley LLP, Suite 350, 155-108th Avenue Northeast, Bellevue, WA (US).

(21) International Application Number: PCT/US00/14449 (81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW.

(22) International Filing Date: 25 May 2000 (25.05.2000) (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language: English (26) Publication Language: English

(30) Priority Data: 60/136,603 27 May 1999 (27.05.1999) US
09/560,842 28 April 2000 (28.04.2000) US

(71) Applicant: UTM SYSTEMS CORP. [US/US]; Suite 1110, 10900 Northeast Eighth Street, Bellevue, WA 98004-4454 (US).

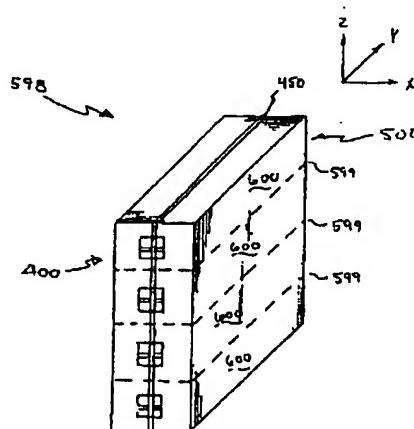
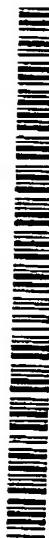
(72) Inventors: OPLE, Angelina; 8206 Caminito Lacayo, La Jolla, CA 92037 (US). LEE, Robert; 717-140th Avenue San Leandro, CA 94577 (US).

Published-

— With international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THIN MAGNETIC MEDIUM READ HEAD



Exhibit

A

WO 00/74040 AU

(57) **Abstract:** A thin film magnetic medium read head (600) is disclosed wherein the gap plane of the head is parallel to a plane generally defined by either the cores or the coils within the head structure. The read head comprises left and right core pieces (100, 200) of magnetic material, each core piece having a magnetic coil wound thereon and a flexible printed wiring board electrically connected to the coil, to form left and right core assemblies. The core assemblies are loaded edgewise into a plurality of slots (403a, 403b) formed in a pair of mirror image brackets, then a face of each bracket is machined so that the face is flush with an edge of the core assemblies. The two bracket (400) are then bonded to one another with a non-magnetic foil layer (450) between the brackets to establish a gap between opposing core assemblies. The brackets are then divided into separate heads along planes parallel to a plane parallel to the gap plane. A surface of each individual head parallel to the gap plane is then machined to expose a portion of the core assemblies and the gap.

IAP5 Rec'd PCT/PTO 10 FEB 2006

THIN MAGNETIC MEDIUM READ HEAD

10/568097

Legal status (INPADOC) of WO0074040

WO F

0014449 W

(Patent of invention)

PRS Date :

2000/12/07

PRS Code :

AK

Code Expl.:

+ DESIGNATED STATES

KD OF CORRESP. PAT.:

A1

DESIGNATED COUNTR.:

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT
RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW

PRS Date :

2000/12/07

PRS Code :

AL

Code Expl.:

+ DESIGNATED COUNTRIES FOR REGIONAL
PATENTS

KD OF CORRESP. PAT.:

A1

DESIGNATED COUNTR.:

GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD
RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL
PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

PRS Date :

2001/01/31

PRS Code :

121

Code Expl.:

EP: THE EPO HAS BEEN INFORMED BY WIPO
THAT EP WAS DESIGNATED IN THIS
APPLICATION

PRS Date :

2001/04/12

DFPE

Code Expl.:

REQUEST FOR PRELIMINARY EXAMINATION
FILED PRIOR TO EXPIRATION OF 19TH MONTH
FROM PRIORITY DATE (PCT APPLICATION
FILED BEFORE 20040101)

Exhibit

B

PRS Date :

2002/03/28

PRS Code :

REG DE 8642

Code Expl.:

- IMPACT ABOLISHED FOR DE - I.E. PCT APPL.
NOT ENT. GERMAN PHASE

PRS Date :

2002/12/11

PRS Code :

122

Code Expl.:

- EP: PCT APP. NOT ENT. EUROP. PHASE

100-179-0174

FILED 3:00 AM

6-MAY-10

DEPARTMENT OF
LAW
REVENUE
WA

12.91 + 8.00

FINANCING STATEMENT — FOLLOW INSTRUCTIONS CAREFULLY
This Financing Statement is presented for filing pursuant to the Uniform Commercial Code
and will remain effective, with certain exceptions, for 5 years from date of filing.

A. NAME & TEL # OF CONTACT AT FILER (optional)	B. FILING OFFICE ACCT. # (optional)
Jeffrey T. Haley	

C. RETURN COPY TO: (Name and Mailing Address)

Jeffrey T. Haley
 Graybeal Jackson Haley LLP
 155 - 108th Ave NE Suite 350
 Bellevue, WA 98004-5901
 425-455-5575

D. OPTIONAL DESIGNATION (if applicable): LESSOR/LESSEE CONSIGNOR/CONSIGNEE NON-UCCFILING

1. DEBTOR'S EXACT FULL LEGAL NAME - insert only one debtor name (1a or 1b)

1a. ENTITY'S NAME	UTM Systems Corp		
OR	1b. INDIVIDUAL'S LAST NAME	FIRST NAME	MIDDLE NAME
			SUFFIX
1c. MAILING ADDRESS	CITY	STATE	COUNTRY
40 Lake Bellevue Drive #350	Bellevue	WA	US
1d. S.S. OR TAX I.D.#	OPTIONAL ADD'L INFO RE ENTITY DEBTOR	1e. TYPE OF ENTITY	1f. ENTITY'S STATE OR COUNTRY OF ORGANIZATION
		Corporation	WA
1g. ENTITY'S ORGANIZATIONAL I.D.#, if any			
<input type="checkbox"/> NONE			

2. ADDITIONAL DEBTOR'S EXACT FULL LEGAL NAME - Insert only one debtor name (2a or 2b)

2a. ENTITY'S NAME			
OR	2b. INDIVIDUAL'S LAST NAME	FIRST NAME	MIDDLE NAME
			SUFFIX
2c. MAILING ADDRESS	CITY	STATE	COUNTRY
			POSTAL CODE
2d. S.S. OR TAX I.D.#	OPTIONAL ADD'L INFO RE ENTITY DEBTOR	2e. TYPE OF ENTITY	2f. ENTITY'S STATE OR COUNTRY OF ORGANIZATION
			<input type="checkbox"/> NONE
2g. ENTITY'S ORGANIZATIONAL I.D.#, if any			

3. SECURED PARTY'S (ORIGINAL S/P OR ITS TOTAL ASSIGNEE) EXACT FULL LEGAL NAME - insert only one secured party name (3a or 3b)

3a. ENTITY'S NAME			
OR	Graybeal Jackson Haley LLP		
3b. INDIVIDUAL'S LAST NAME	FIRST NAME	MIDDLE NAME	SUFFIX
Haley	Jeffrey	T.	
3c. MAILING ADDRESS	CITY	STATE	POSTAL CODE
155 - 108th Ave NE #350	Bellevue	WA	98004

4. This FINANCING STATEMENT covers the following types or items of property:

All rights to inventions, patent applications and trademark applications described in Status Reports attached and all papers that are evidence thereof.

Exhibit

10 R

C

5. CHECK This FINANCING STATEMENT is signed by the Secured Party instead
BOX (a) In collateral already subject to a security interest in another jurisdiction
(if applicable) debtor's location was changed to this state, or (b) in accordance with other terms of the financing statement.

6. REQUIRED SIGNATURE(S)

*Jeffrey T. Haley*7. If filed in Florida (check one)
 Documentary stamp
 stamp tax card tax not applicable8. This FINANCING STATEMENT is to be filed [or record] (or recorded) in the REAL ESTATE RECORDS
Attach Addendum (if applicable)9. Check to REQUEST SEARCH CERTIFICATE(S) on Debtor(s)
(ADDITIONAL FEE)
(optional) All Debtors Debtor 1 Debtor 2

Status of UTM Systems Corporation Patent Applications
April 1, 2001

1624-1-2	U.S. APPL. NO.:	09/322,670	DATE FILED: May 28, 1999
1624-2	U. S. APPL. NO.:	09/322,669	DATE FILED: May 28, 1999
1624-3-3	U. S. APPL. NO.:	09/560,842	DATE FILED: April 28, 2000
1624-3-4	PCT/US00/14449		DATE FILED: May 25, 2000
1624-3-5	Taiwan Appl. No.	89110220	DATE FILED: June 14, 2000.
1624-4-4	U. S. APPL. NO.:	09/580,321	DATE FILED: May 26, 2000
1624-4-PCT	PCT Application to be filed.		
1624-16-1	PCT/US00/14592		DATE FILED: May 26, 2000
1624-16-2	(US) waiting to file application based on pending PCT application.		
1624-17-1	PCT/US00/14591		DATE FILED: May 26, 2000
1624-17-2	(US) waiting to file application based on pending PCT application.		

TRADEMARK STATUS REPORT

UTM Systems Corporation
(Client No. 1624)

<i>Country/ State*</i>	<i>Mark</i>	<i>Application No.</i>	<i>Application Date</i>	<i>Registration No.</i>	<i>Registration Date</i>	<i>Next Deadline</i>	<i>Action Required</i>	<i>Docket</i>	<i>Status/Other</i>
China	UNIVERSAL TELLER MACHINE	9900145056	1999/12/02					1624-9-4	ABANDONED
China	UTM		1999/12/02					1624-7-4	PENDING
China	UTM SYSTEMS ⁱ	9900145055	1999/12/02				Check status	1624-8-4	PENDING 7/5/00: response filed
European Union (CTM)	UNIVERSAL TELLER MACHINE	1367358				2000/12/05	Check status	1624-9-6	PENDING 6/5/00: published
European Union (CTM)	UTM	1367572	1999/11/02	1367372	1999/11/02	2004/11/02	Use due	1624-7-6	REGISTERED 11/2/2009: renewal
European Union (CTM)	UTM SYSTEMS	1367226				2000/12/05	Check status	1624-8-6	PENDING 6/5/00: published
Hong Kong	UNIVERSAL TELLER MACHINE	99/16148	1999/11/08					1624-9-3	ABANDONED
Hong Kong	UTM	99/16146	1999/11/08			2001/01/10	Check status	1624-7-3	PENDING
Hong Kong	UTM SYSTEMS	99/16147	1999/11/08					1624-8-3	ABANDONED

TRADEMARK STATUS REPORT

UTM Systems Corporation
 (Client No. 1624)

Country/ State*	Mkt	Application No.	Application Date	Registration No.	Registration Date	Next Deadline	Action Required	Docket	Status/Other
Japan	UNIVERSAL TELLER MACHINE ⁱⁱ	11-98904	1999/11/01					1624-9-2	ABANDONED
Japan	UTM ⁱⁱⁱ	11-98902	1999/11/01		2001/05/11	Check status		1624-7-2	PENDING 11/8/00: response filed
Japan	UTM SYSTEMS ^v	11-98903	1999/11/01					1624-8-2	ABANDONED
Mexico	UNIVERSAL TELLER MACHINE ^v	397299	1999/11/01	656405	1999/11/01	2009/11/01	Renewal	1624-9-5	REGISTERED
Mexico	UTM ^v	397298	1999/11/01	656404	1999/11/01	2009/11/01	Renewal	1624-7-5	REGISTERED
Mexico	UTM SYSTEMS ^{vi}	397297	1999/11/01	656403	1999/11/01	2009/11/01	Renewal	1624-8-5	REGISTERED
Taiwan	UNIVERSAL TELLER MACHINE	88054370	1999/11/01					1624-9-7	ABANDONED
Taiwan	UTM	88054368	1999/11/01					1624-7-7	ABANDONED
Taiwan	UTM SYSTEMS	88054369	1999/11/01					1624-8-7	ABANDONED
United States	SIMPLY MORE SECURE	76/080,559	2000/06/29		2000/12/29	Priority deadline	1624-25-1	PENDING	

TRADEMARK STATUS REPORT

UTM Systems Corporation
(Client No. 1624)

<i>Country/ State*</i>	<i>Mark</i>	<i>Application No.</i>	<i>Application Date</i>	<i>Registration No.</i>	<i>Registration Date</i>	<i>Next Deadline</i>	<i>Action Required</i>	<i>Docket</i>	<i>Status/Other</i>
United States	UNIVERSAL TELLER MACHINE	75/646,952			2001/09/26	Check status		1624-9-1	ABANDONED 7/4/00: published Abandoned/check to see if they want to revive in 6 months
United States	UTM™ [®]	75/646,241	1999/02/19		2001/07/24	Check status		1624-7-1	PENDING SOU Filed 4/24/01
United States	UTM SYSTEMS	75/646,236			2001/09/26	Check status		1624-8-1	ABANDONED 7/4/00: published Check to see if they want to revive in 6 months

- ⁱ Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- ⁱⁱ Electrical communication machines and instruments; electronic machines and instruments and parts and accessories for these
- ⁱⁱⁱ Electrical communication machines and instruments
- ^{iv} Electrical communication machines and instruments; electronic machines and instruments and parts and accessories for these
- ^v Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- ^{vi} Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- ^{vii} Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- ^{viii} Security and authentication devices, namely integrated circuit chips featuring embedded authentication and encryption logic for incorporation in computers, telephones and other communication devices

INVOLUNTARY PETITION

United States Bankruptcy Court for the Western District of Washington, at Seattle

IN RE (Name of Debtor-If individual, Last First Middle UTM Systems Corporation, a Washington corporation	ALL OTHER NAMES used by Debtor in the last 6 years (Include married, maiden and trade names)
SOC SEC/TAX ID NO. (If more than one, state all) EIN 91-1890213	
STREET ADDRESS OF DEBTOR (No. and Street, City, State, and zip code) 40 Lake Bellevue Drive, Ste. 350 Bellevue, WA 98005	MAILING ADDRESS OF DEBTOR (If different from street address)
LOCATION OF PRINCIPAL ASSETS OF BUSINESS DEBTOR (If different from previously listed address)	
CHAPTER OF BANKRUPTCY CODE UNDER WHICH PETITION IS FILED <input checked="" type="checkbox"/> Chapter 7 <input type="checkbox"/> Chapter 11	
INFORMATION REGARDING DEBTOR (Check applicable boxes)	
Petitioners believe	TYPE OF DEBTOR
<input type="checkbox"/> Debts are primarily consumer debts	<input type="checkbox"/> Individual <input type="checkbox"/> Corporation Publicly Held
<input checked="" type="checkbox"/> Debts are primarily business debts (Complete Section A and B)	<input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Corporation Not Publicly Held (L.L.C.)
	<input type="checkbox"/> Other _____
A. TYPE OF BUSINESS (Check one)	B. BRIEFLY DESCRIBE NATURE OF BUSINESS
<input type="checkbox"/> Professional Transportation Commodity Broker	
<input type="checkbox"/> Retail/ Manufacturing/ Construction	Design, Development and Manufacture of Software
Wholesale Mining Real Estate	
Railroad Stockbroker X Other	
VENUE	
(X) Debtor has been domiciled or has had a residence, principal place of business, or principal assets in the District for 180 days immediately preceding the date of this petition or for a longer part of such 180 days than in any other District	
<input type="checkbox"/> A bankruptcy case concerning debtor's affiliate, general partner or partnership is pending in this District.	
PENDING BANKRUPTCY CASE FILED BY OR AGAINST ANY PARTNER OR AFFILIATE OF THIS DEBTOR (Report information for any additional cases on attached sheets)	
Name of Debtor N/A	Case Number
Relationship	District
ALLEGATIONS (Check applicable boxes)	
1. <input checked="" type="checkbox"/> Petitioners are eligible to file this petition pursuant to 2. <input checked="" type="checkbox"/> The Debtor is a person against whom an order for relief 11 of the United States Code. 3.a. <input checked="" type="checkbox"/> The Debtor is generally not paying such debtor's debts due, unless such debts are the subject of a bona fide di or b. <input type="checkbox"/> Within 120 days preceding the filing of this petition, a trustee, receiver, or agent appointed or authorized to take substantially all of the property of the debtor for the purpose against such property, was appointed or took possession	
Case #: 01-19563-KA07 Name : UTM SYSTEMS CORPORATION Judge : KAREN OVERSTREET 341: 8 Chapter: 7 <hr/> Filed : August 27, 2001 12:37:52 Deputy : T SCOTT Receipt: 44749 <hr/> RELIEF ORDERED Clerk, U.S. Bankruptcy Court Western District of Washington	

Exhibit

D

~~-----~~

Name of Debtor: UTM Systems Corporation

Case No. _____

TRANSFER OF CLAIM

() Check this box if there has been a transfer of any claim against the debtor by or to any petitioner. Attach all documents evidencing the transfer and any statements that are required under Bankruptcy Rule 1003(a).

REQUEST FOR RELIEF

Petitioner(s) request that an order for relief be entered against the debtor under the chapter of title 11, United States Code, specified in this petition

Petitioners declare under penalty of perjury that the foregoing is true and correct according to the best of their knowledge, information and belief.


Signature of Petitioner or Representative (State title)

Randolph V. Cook August 24, 2001
Name of Petitioner Date Signed

Name & Mailing
Address of Individual
Signing in Representative
Capacity


Signature of Petitioner or Representative (State title)

Thomas E. Honey August 24, 2001
Name of Petitioner Date Signed

Name & Mailing
Address of Individual
Signing in Representative
Capacity


Signature of Petitioner or Representative (State title)

Jean Ople August 24, 2001
Name of Petitioner Date Signed

Name & Mailing
Address of Individual
Signing in Representative
Capacity


Signature of Petitioner or Representative (State title)

Philip Brown August 24, 2001
Name of Petitioner Date Signed

Name & Mailing
Address of Individual
Signing in Representative
Capacity

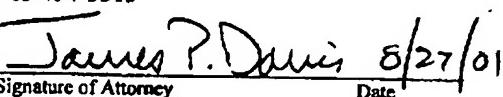
Petitioner's Attorneys:

James P. Davis
Casey Gordon Davis, P.S.
411 - 108th Ave., N.E. Ste 550
Bellevue, WA 98004
425 454-3313


Signature of Attorney Date

Petitioner's Attorneys:

James P. Davis
Casey Gordon Davis, P.S.
411 - 108th Ave., N.E. Ste 550
Bellevue, WA 98004
425 454-3313


Signature of Attorney Date

Name of Attorney/Firm (If any)

Address

Telephone No.

Signature of Attorney Date

Name of Attorney/Firm (If any)

Address

Telephone No.

Signature of Attorney Date

Name of Debtor: UTM Systems Corporation		
Case No. _____		
PETITIONING CREDITORS		
Name and Address of Petitioner: Randolph V. Cook 23520 N.E. 21 st St. Sammamish, WA 98074	Nature of Claim: unpaid employee compensation and benefits	Amount of Claim: \$298,147.20
Name and Address of Petitioner: Thomas E. Honey 2760 76 th Ave. S.E., #403 Mercer Island, WA 98040	Nature of Claim: (1) unpaid employee compensation and benefits (2) promissory note	Amount of Claim: (1) \$128,946.89 (2) \$ 3,181.81
Name and Address of Petitioner: Jean Ople 8206 Caminito Lacayo La Jolla, CA 92037	Nature of Claim: unpaid employee compensation and benefits	Amount of Claim: \$88,571.31
Name and Address of Petitioner: Philip Brown 14321 S.E. 6 th St., Apt. M106 Bellevue, WA 98007	Nature of Claim: unpaid employee compensation and benefits	Amount of Claim: \$6,100.00
Note: If there are more than three petitioners, attach additional sheets with the statement under penalty of perjury, petitioner(s) signatures under the statement and the name(s) of attorney(s) and petitioning creditor infor- mation in the format above		Total Amount of Petitioners' Claims: \$524,947.21

Name of Debtor: UTM Systems Corporation		
Case No.		
<input type="checkbox"/> Check this box if there has been a transfer of any claim against the debtor by or to any petitioner. Attach all documents evidencing the transfer and any statements that are required under Bankruptcy Rule 1003(n).		
REQUEST FOR RELIEF		
Petitioner(s) request that an order for relief be entered against the debtor under the chapter of title 11, United States Code, specified in this petition		
Petitioners declare under penalty of perjury that the foregoing is true and correct according to the best of their knowledge, information and belief.		
<u>x</u> _____ Signature of Petitioner or Representative (State title)		
Randolph V. Cook Name of Petitioner	August <u>____</u> , 2001 Date Signed	Petitioner's Attorneys: James P. Davis Casey Gordon Davis, P.S. 411 - 108 th Ave., N.E. Ste 550 Bellevue, WA 98004 425 454-3313
Name & Mailing Address of Individual Signing in Representative Capacity		
<u>x</u> <i>Thomas E. Honey</i> Signature of Petitioner or Representative (State title)		
Thomas E. Honey Name of Petitioner	August <u>27</u> , 2001 Date Signed	Petitioner's Attorneys: James P. Davis Casey Gordon Davis, P.S. 411 - 108 th Ave., N.E. Ste 550 Bellevue, WA 98004 425 454-3313
Name & Mailing Address of Individual Signing in Representative Capacity		
<u>x</u> _____ Signature of Petitioner or Representative (State title)		
Jean Ogle Name of Petitioner	August <u>____</u> , 2001 Date Signed	Petitioner's Attorneys: James P. Davis Casey Gordon Davis, P.S. 411 - 108 th Ave., N.E. Ste 550 Bellevue, WA 98004 425 454-3313
Name & Mailing Address of Individual Signing in Representative Capacity		
<u>x</u> _____ Signature of Petitioner or Representative (State title)		
Philip Brown Name of Petitioner	August <u>____</u> , 2001 Date Signed	Petitioner's Attorneys: James P. Davis Casey Gordon Davis, P.S. 411 - 108 th Ave., N.E. Ste 550 Bellevue, WA 98004 425 454-3313
Name & Mailing Address of Individual Signing in Representative Capacity		

Name of Debtor: UTM Systems Corporation		Case No.
<input checked="" type="checkbox"/> Check this box if there has been a transfer of any claim against the debtor by or to any petitioner. Attach all documents evidencing the transfer and any statements that may be filed under Bankruptcy Rule 1003(e).		
TRANSFER OF CLAIM		
REQUEST FOR RELIEF		
Petitioner(s) request that an order for relief be entered against the debtor under the chapter of title 11, United States Code, specified in this petition		
Petitioners declare under penalty of perjury that the foregoing is true and correct according to the best of their knowledge, information and belief.		
1. Signature of Petitioner or Representative (State title) <u>Randolph V. Cook</u> <u>August 1, 2001</u> Name of Petitioner Date Signed Name & Mailing _____ Address of Individual _____ Signing in Representative _____ Capacity _____ <small>*****</small>		
Petitioner's Attorney: James P. Davis Casey Gordon Davis, P.S. 411 - 108 th Ave., N.E. Ste 550 Bellevue, WA 98004 425 454-3313		
Signature of Attorney _____ Date _____ <small>*****</small>		
2. Signature of Petitioner or Representative (State title) <u>Thomas E. Honey</u> <u>August 1, 2001</u> Name of Petitioner Date Signed Name & Mailing _____ Address of Individual _____ Signing in Representative _____ Capacity _____ <small>*****</small>		
Petitioner's Attorney: James P. Davis Casey Gordon Davis, P.S. 411 - 108 th Ave., N.E. Ste 550 Bellevue, WA 98004 425 454-3313		
Signature of Attorney _____ Date _____ <small>*****</small>		
3. <u>Jean Ogle</u> Signature of Petitioner or Representative (State title) <u>Jean Ogle</u> <u>August 27, 2001</u> Name of Petitioner Date Signed Name & Mailing _____ Address of Individual _____ Signing in Representative _____ Capacity _____ <small>*****</small>		
Signature of Attorney _____ Date _____ <small>*****</small>		
4. Signature of Petitioner or Representative (State title) <u>Philip Brown</u> <u>August 1, 2001</u> Name of Petitioner Date Signed Name & Mailing _____ Address of Individual _____ Signing in Representative _____ Capacity _____ <small>*****</small>		
Signature of Attorney _____ Date _____ <small>*****</small>		

Status of UTM Systems Corporation Patent Applications
April 1, 2001

1624-1-2	U.S. APPL. NO.:	09/322,670	DATE FILED: May 28, 1999
1624-2	U. S. APPL. NO.:	09/322,669	DATE FILED: May 28, 1999
1624-3-3	U. S. APPL. NO.:	09/560,842	DATE FILED: April 28, 2000
1624-3-4	PCT/US00/14449		DATE FILED: May 25, 2000
1624-3-5	Taiwan Appl. No.	89110220	DATE FILED: June 14, 2000.
1624-4-4	U. S. APPL. NO.:	09/580,321	DATE FILED: May 26, 2000
1624-4-PCT	PCT Application to be filed.		
1624-16-1	PCT/US00/14592		DATE FILED: May 26, 2000
1624-16-2	(US) waiting to file application based on pending PCT application.		
1624-17-1	PCT/US00/14591		DATE FILED: May 26, 2000
1624-17-2	(US) waiting to file application based on pending PCT application.		

TRADEMARK STATUS REPORT

UTM Systems Corporation
 (Client No. 1624)

<i>Country/ State*</i>	<i>Mark</i>	<i>Application No.</i>	<i>Application Date</i>	<i>Registration No.</i>	<i>Registration Date</i>	<i>Next Deadline</i>	<i>Action Required</i>	<i>Docket</i>	<i>Status/Other</i>
China	UNIVERSAL TELLER MACHINE	9900145056	1999/12/02					1624-9-4	ABANDONED
China	UTM		1999/12/02					1624-7-4	PENDING
China	UTM SYSTEMS ¹	9900145055	1999/12/02				Check status	1624-8-4	PENDING 7/5/00: response filed
European Union (CTM)	UNIVERSAL TELLER MACHINE	1367358				2000/12/05	Check status	1624-9-6	PENDING 6/5/00: published
European Union (CTM)	UTM	1367572	1999/11/02	1367572	1999/11/02	2004/11/02	Use due	1624-7-6	REGISTERED 11/2/2009: renewal
European Union (CTM)	UTM SYSTEMS	1367226				2000/12/05	Check status	1624-8-6	PENDING 6/5/00: published
Hong Kong	UNIVERSAL TELLER MACHINE	99/16148	1999/11/08					1624-9-3	ABANDONED
Hong Kong	UTM	99/16146	1999/11/08			2001/01/10	Check status	1624-7-3	PENDING
Hong Kong	UTM SYSTEMS	99/16147	1999/11/08					1624-8-3	ABANDONED

TRADEMARK STATUS REPORT

UTM Systems Corporation
 (Client No. 1624)

<i>Country/ State*</i>	<i>Mark</i>	<i>Application No.</i>	<i>Application Date</i>	<i>Registration No.</i>	<i>Registration Date</i>	<i>Next Deadline</i>	<i>Action Required</i>	<i>Docket</i>	<i>Status/Other</i>
Japan	UNIVERSAL TELLER MACHINE ⁱⁱ	11-98904	1999/11/01					1624-9-2	ABANDONED
Japan	UTM ⁱⁱⁱ	11-98902	1999/11/01					1624-7-2	PENDING 11/8/00: response filed
Japan	UTM SYSTEMS ^{iv}	11-98903	1999/11/01					1624-8-2	ABANDONED
Mexico	UNIVERSAL TELLER MACHINE ^v	397299	1999/11/01	656405	1999/11/01	2009/11/01	Renewal	1624-9-5	REGISTERED
Mexico	UTM ^{vi}	397298	1999/11/01	656404	1999/11/01	2009/11/01	Renewal	1624-7-5	REGISTERED
Mexico	UTM SYSTEMS ^{vii}	397297	1999/11/01	656403	1999/11/01	2009/11/01	Renewal	1624-8-5	REGISTERED
Taiwan	UNIVERSAL TELLER MACHINE	88054370	1999/11/01					1624-9-7	ABANDONED
Taiwan	UTM	88054368	1999/11/01					1624-7-7	ABANDONED
Taiwan	UTM SYSTEMS	88054369	1999/11/01					1624-8-7	ABANDONED
United States	SIMPLY MORE SECURE	76/080,559	2000/06/29			2000/12/29	Priority deadline	1624-25-1	PENDING

TRADEMARK STATUS REPORT

UTM Systems Corporation
(Client No. 1624)

Country/ State*	Mark	Application No.	Application Date	Registration No.	Registration Date	Next Deadline	Action Required	Docket	Status/Other
United States	UNIVERSAL TELLER MACHINE	75/646,952			2001/09/26	Check status	1624-9-1	ABANDONED 7/4/00: published	Abandoned/check to see if they want to revive in 6 months
United States	UTM™	75/646,241	1999/02/19			2001/07/24	Check status	1624-7-1 PENDING SOU Filed 4/24/01	
United States	UTM SYSTEMS	75/646,236			2001/09/26	Check status	1624-8-1	ABANDONED 7/4/00: published	Check to see if they want to revive in 6 months

- i Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- ii Electrical communication machines and instruments; electronic machines and instruments and parts and accessories for these
- iii Electrical communication machines and instruments
- iv Electrical communication machines and instruments
- v Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- vi Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- vii Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- viii Security and authentication devices, namely integrated circuit chips featuring embedded authentication and encryption logic for incorporation in computers, telephones and other communication devices

10/568097

IAP5 Rec'd PCT/PTO 10 FEB 2006

Hon. Karen A. Overstreet
Chapter 7
Hearing: April 22, 2005
9:30 a.m.

Exhibit E

UNITED STATES BANKRUPTCY COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

In re } No. 01-19563
UTM SYSTEMS CORPORATION, } MOTION OF GRAYBEAL JACKSON &
Debtor. } HALEY LLP FOR RELIEF FROM STAY

COMES NOW Graybeal Jackson & Haley LLP (“GJH”), a secured creditor of the debtor, and moves for relief as follows:

INTRODUCTION

1. **GJH's Lien.** GJH holds a claim against the estate for legal services provided to UTM Systems Corporation ("UTM"). GJH's claim is secured by a first position security interest in the debtor's patent applications and trademark applications, which security interest was perfected by the filing of a UCC-1 Financing Statement with the Department of Licensing in Olympia, Washington on May 9, 2001.

2. Amount of GJH's Claim. GJH filed its proof of secured claim on February 28, 2002, a copy of which is attached hereto as Exhibit A. The amount of its claim as of the date of the order for relief herein on November 27, 2001 was \$85,795.13. Interest on this amount accrues at the legal rate of 12 percent per annum

3. Background of Case. This case was commenced by the filing of an involuntary Chapter 7 petition against UTM on August 27, 2001. An Order for Relief and an agreed Order Converting the case to a case under Chapter 11 were entered on November 27, 2001. Subsequently, the case was

**MOTION OF GRAYBEAL JACKSON & HALEY LLP
FOR RELIEF FROM STAY - 1**

LAW OFFICE OF JOHN J. MITCHELL
811 First Ave., Suite 620
Seattle, WA 98104
(206) 903-8555

converted to a Chapter 7 on October 18, 2002, and Daniel E. Forsch was appointed Trustee.

4. Trustee Has Been Unable To Liquidate GJH's Collateral. In November 2002, the Trustee sold UTM's equipment and furnishings at its business premises. The only remaining assets in the estate are the debtor's intellectual property, which includes the patent and trademark applications that constitute UTM's collateral and certain software and test boards. The Trustee has been unable to date to sell the intellectual property.

RELIEF REQUESTED

5. By this motion GJH seeks relief from the automatic stay to permit it to realize upon its collateral and to pursue available remedies under the laws of the State of Washington.

BASIS FOR RELIEF

6. GJH Is Entitled To Relief From Stay.

a. GJH Is Entitled To Relief From Stay For Cause. Section 362(d)(1) of the Bankruptcy Code provides that the stay shall be lifted for “cause.” “Cause” has no clear definition and is determined on a case-by-case basis. *In re MacDonald*, 755 F.2d 715, 717 (9th Cir. 1985). GJH has been precluded from realizing on its collateral since August 2001. GJH has not received payment for its services that were provided in 2001. The Trustee continues in possession of GJH’s collateral and has been unable to find a buyer for the collateral since his appointment two and one-half years ago. Under the circumstances of this case, cause exists for relief from stay.

b. WSB Is Entitled To Relief From Stay under Section 362(d)(2). Section 362(d)(2) provides a second ground for relief from stay. Section 362(d)(2) provides that the Court shall lift the stay if:

- (A) the Debtor does not have an equity in such property; and
 - (B) such property is not necessary to an effective reorganization.

The Trustee has been unable to locate an interested buyer for GJH's collateral at any price, which is evidence that the debtor's patent applications, which were abandoned under federal patent law in 2002, and trademark applications have little if any value, certainly nowhere near the amount of GJH's claim. Since this case is now a Chapter 7 case, Section 362(d)(B) has no application. Thus, given the lack of any apparent value whatsoever in the patent and trademark applications, GJH is entitled to relief from

1 stay under Section 362(d)(2).

2 CONCLUSION

3 The Trustee has advised the undersigned that he will not resist this request for relief from stay.
4 There is no reason, therefore, to deny GJH an opportunity to realize on its collateral. An order should
5 be entered in the form attached hereto as Exhibit B granting GJH relief from stay.

6 DATED this 23rd day of March, 2005.

7 /s/ John J. Mitchell
8 WSBA No. 12757
9 Attorney for Graybeal Jackson Haley LLP

United States Bankruptcy Court

Case Number 01-12345

Name of Debtor UTM Systems Corporation

NOTE: This form should not be used to make a claim for an administrative expense arising after the commencement of the case. A "request" for payment of an administrative expense may be filed pursuant to 11 U.S.C. § 503

Name of Creditor (The person or other entity to whom the debtor owes money or property)

Graybeal Jackson Haley LLP

Name and Address Where Notices Should be Sent
155 - 108th Ave. NE Suite 350
Bellevue, WA 98004-5793

Telephone No. 425 455 5575

Account or other number by which creditor identifies debtor:
1624

1. BASIS FOR CLAIM

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Goods sold | <input checked="" type="checkbox"/> Services performed |
| <input type="checkbox"/> Money loaned | <input type="checkbox"/> Personal injury/wrongful death |
| <input type="checkbox"/> Taxes | <input type="checkbox"/> Other _____ |

Check box if you are aware that anyone else has filed a proof of claim relating to your claim. Attach copy of statement giving particulars.

Check box if you have never received any notices from the bankruptcy court in this case.

Check box if the address differs from the address on the envelope sent to you by the court.

R. C. L. W. /

1/28/01

(1 S.)

This space for court use only

Check here if this claim

 amends replaces a previously filed claim dated: _____ Retiree benefits as defined in 11 U.S.C. § 1114(a) Wages, salaries, and compensation (Fill out below)

Your social security number _____

Unpaid compensation for services performed from _____ to _____

2. DATE DEBT WAS INCURRED: 4/1/00 - 11/26/01

3. IF COURT JUDGMENT, DATE OBTAINED:

4. Total Amount of Claim at Time Case Filed: \$ 85,795.13

If all or part of your claim is secured or entitled to priority, also complete Item 5 or 6 below.

 Check this box if claim includes interest or other charges in addition to the principal amount of the claim. Attach itemized statement of all interest or additional charges.

5. Secured claim.

Check this box if your claim is secured by collateral (including a right of setoff).

Brief Description of Collateral:

- Real Estate
 Motor Vehicle

 Other Patent Applications and Trademarks

Value of collateral: \$100,000+

Amount of arrearage and other charges at time case filed included in secured claim above, if any \$ 80,752.49

6. Unsecured Priority Claim

 Check this box if you have an unsecured priority claim

Amount entitled to priority \$ _____

Specify the priority of the claim:

 Claim arose on or after August 27, 2001 and before November 27, 2001 - 11 U.S.C. § 507(a)(2) Wages, salaries, or commissions (up to \$4650)* earned within 90 days before filing of the bankruptcy petition or cessation of the debtor's business, whichever is earlier - 11 U.S.C. § 507(a)(3) Contributions to an employee benefit plan - 11 U.S.C. § 507(a)(4) Up to \$2,100* of deposits toward purchase, lease, or rental of property or services for personal, family, or household use - 11 U.S.C. § 507(a)(6) Alimony, maintenance, or support owed to a spouse, former spouse, or child - 11 U.S.C. § 507(a)(7) Taxes or penalties owed to governmental units - 11 U.S.C. § 507(a)(8) Other - Specify applicable paragraph of 11 U.S.C. § 507(a) _____

*Amounts are subject to adjustment on 4/1/04 and every 3 years thereafter with respect to cases commenced on or after the date of adjustment.

7. CREDITS: The amount of all payments on this claim has been credited and deducted for the purpose of making this proof of claim.

Mail claim To:

U.S. Bankruptcy Court

1200 6th Ave. #315

Seattle, WA 98101

8. SUPPORTING DOCUMENTS: Attach copies of supporting documents such as promissory notes, purchase orders, invoices, itemized statements of running accounts, contracts, court judgments, mortgages, security agreements, and evidence of perfection of liens. DO NOT SEND ORIGINAL DOCUMENTS. If the documents are not available, explain. If the documents are voluminous, attach a summary.

9. DATE-STAMPED COPY: To receive an acknowledgment of the filing of your claim, enclose a stamped, self-addressed envelope and copy of the proof of claim.

Date:

2/27/02

Sign and print the name and title, if any, of the creditor or other person authorized to file this claim (attach copy of power of attorney, if any)

Jeffrey T. Haley

This Space Is for Court Use Only

Penalty for presenting fraudulent claim: Fine of up to \$500,000 or imprisonment for up to 5 years, or both. 18 U.S.C. §§152 and 3571 and AW-235.cs (4/1/01)

CC: Joel Green, Tax Attorneys, Inc. w/enclosures

THIS SPACE FOR USE OF FILING OFFICER

1991-179-0174

FINANCING STATEMENT — FOLLOW INSTRUCTIONS CAREFULLY

This Financing Statement is presented for filing pursuant to the Uniform Commercial Code and will remain effective, with certain exceptions, for 5 years from date of filing.

A. NAME & TEL. # OF CONTACT AT FILER (optional) B. FILING OFFICE ACCT. # (optional)

Jeffrey T. Haley

B. FILING OFFICE ACCT. # (optional)

C. RETURN COPY TO: (Name and Mailing Address)

Jeffrey T. Haley
Graybeal Jackson Haley LLP
155 - 108th Ave NE Suite 350
Bellevue, WA 98004-5901
425-455-5575

D. OPTIONAL DESIGNATION (if applicable): LESSOR/LESSEE CONSIGNOR/CONSIGNEE NON-UCC FILING

1. DEBTOR'S EXACT FULL LEGAL NAME - Insert only one debtor name (1a or 1b)

1a. ENTITY'S NAME UTM Systems Corp		FIRST NAME	MIDDLE NAME	SUFFIX	
OR	1b. INDIVIDUAL'S LAST NAME Haley				
1c. MAILING ADDRESS 40 Lake Bellevue Drive #350		CITY Bellevue	STATE WA	COUNTRY US	POSTAL CODE 98005
1d. S.S. OR TAX I.D.# 425-455-5575	OPTIONAL ADDNL INFO RE ENTITY DEBTOR	1e. TYPE OF ENTITY Corporation	1f. ENTITY'S STATE OR COUNTRY OF ORGANIZATION WA	1g. ENTITY'S ORGANIZATIONAL I.D.#, if any None	

2. ADDITIONAL DEBTOR'S EXACT FULL LEGAL NAME - Insert only one debtor name (2a or 2b)

2a. ENTITY'S NAME Graybeal Jackson Haley LLP		FIRST NAME	MIDDLE NAME	SUFFIX	
OR	2b. INDIVIDUAL'S LAST NAME Haley				
2c. MAILING ADDRESS 155 - 108th Ave NE #350		CITY Bellevue	STATE WA	COUNTRY US	POSTAL CODE 98004
2d. S.S. OR TAX I.D.# 425-455-5575	OPTIONAL ADDNL INFO RE ENTITY DEBTOR	2e. TYPE OF ENTITY Corporation	2f. ENTITY'S STATE OR COUNTRY OF ORGANIZATION WA	2g. ENTITY'S ORGANIZATIONAL I.D.#, if any None	

3. SECURED PARTY'S (ORIGINAL S/P OR ITS TOTAL ASSIGNEE) EXACT FULL LEGAL NAME - Insert only one secured party name (3a or 3b)

3a. ENTITY'S NAME Graybeal Jackson Haley LLP		FIRST NAME	MIDDLE NAME	SUFFIX	
OR	3b. INDIVIDUAL'S LAST NAME Haley	Jeffrey	T.		
3c. MAILING ADDRESS 155 - 108th Ave NE #350		CITY Bellevue	STATE WA	COUNTRY US	POSTAL CODE 98004

4. This FINANCING STATEMENT covers the following types of items of property:

All rights to inventions, patent applications and trademark applications described in Status Reports attached and all papers that are evidence thereof.

10 R

5. CHECK <input type="checkbox"/> This FINANCING STATEMENT is signed by the Secured Party instead of the Debtor to perfect a security interest BOX (a) in collateral already subject to a security interest in another jurisdiction when it was brought into this state, or when the (if applicable) debtor's location was changed to this state, or (b) in accordance with other statutory provisions [additional data may be required]	7. If filed in Florida (check one) <input type="checkbox"/> Documentary <input type="checkbox"/> Documentary stamp stamp tax paid <input type="checkbox"/> tax not applicable
6. REQUIRED SIGNATURE(S) <i>Jeffrey T. Haley</i>	8. <input type="checkbox"/> This FINANCING STATEMENT is to be filed [or record] (or recorded) in the REAL ESTATE RECORDS Attn: Addendum <input type="checkbox"/> (if applicable)
	9. Check to REQUEST SEARCH CERTIFICATE(S) on 12/10/95 [ADDITIONAL FEE] <input type="checkbox"/> All Debtors <input type="checkbox"/> Debtor 1 <input type="checkbox"/> Debtor 2 (optional)

(1) FILING OFFICER COPY — NATIONAL FINANCING STATEMENT (FORM UCC1) (TRANS) (REV. 12/18/95)

FILED 3:00 AM
10 MAY 6 1991

DEPARTMENT OF
LAW
WA

Debtor: UTM systems corp

SECURITY AGREEMENT AND COLLATERAL ASSIGNMENT OF PATENT AND TRADEMARK RIGHTS

This Agreement is entered into as of the 1st day of April, 2001 by UTM systems corp, a Washington Corporation ("Debtor") with its chief executive office located at Bellevue, Washington; and Graybeal Jackson Haley, a Limited Liability Partnership ("Secured Party"), with an office located at Bellevue, Washington.

Between January 1, 2000 and April 1, 2001 Secured Party created intellectual property for Debtor in the form of patent applications and trademark applications for which Secured Party is owed \$56,335.35. All such intellectual property is and has been in the care of Secured Party from the date of creation. To secure amounts owed by Debtor for the creation of said property and future amounts accrued up to December 31, 2001, Debtor agrees that Secured Party has a lien on the intellectual property created by Secured Party for Debtor from the date of creation. Terms of said lien are stated in writing as follows.

1. Definitions. As used in this Agreement:

"Collateral" means all rights to inventions, patent applications and trademark applications described in the Status Reports attached to this Agreement and all papers that are evidence thereof.

"Default" means any event referred to in section 5 of this Agreement.

"Obligations" means the obligation of Debtor to pay Secured Party for the creation of the Collateral including payment on a certain promissory note dated April 1, 2001.

2. Security Interest. As collateral security for the prompt and unconditional payment and performance of the Obligations, Debtor hereby grants, pledges and assigns to Secured party a security interest in all of Debtor's right, title and interest in and to the Collateral.

3. Representations and Warranties. Debtor represents and warrants to Secured Party and agrees with Secured Party as follows:

a. Authority. Debtor has the authority to enter into this Agreement.

b. No Violation. The execution, delivery and performance of this Agreement does not violate the terms of any other agreement, document or instrument to which Debtor is a party.

4. Debtor's Covenants. Debtor further covenants and agrees with Secured Party as follows:

a. Pending Applications. Debtor shall prosecute diligently the applications for patents and trademarks pending as of the date of this Agreement, and unless specifically advised by counsel that to do so is unnecessary or inadvisable, shall do any and all acts which are necessary or desirable to preserve, maintain and enforce all rights in the Collateral.

b. Limitations on Disposition. Debtor shall not sell, license, transfer or otherwise dispose of or grant any rights to any of the Collateral except in the ordinary course of business or attempt or contract to do so, without the prior written consent of Secured Party.

Debtor: UTM systems corp

c. Limitation on Liens; Defense of Collateral. Debtor shall not create, permit or suffer to exist, and shall defend the Collateral against and take such other action as is necessary to remove, any lien on the Collateral, except the liens granted to Secured Party under this Agreement. Debtor shall further defend the right, title and interest of the Secured Party in and to Debtor's rights to the Collateral against the claims and demands of all persons other than the Secured Party. In the event that any Collateral is infringed or misappropriated by a third party, Debtor shall notify Secured Party promptly after Debtor learns thereof and shall, unless such Collateral is not material to the conduct of Debtor's business, promptly sue for infringement or misappropriation and to recover any and all damages for such infringement or misappropriation and take such other actions as are appropriate under the circumstances to protect such Collateral.

d. Performance. Debtor shall pay and perform all the Obligations according to their terms.

e. Expenditures by Secured Party. Debtor will reimburse Secured Party upon demand for any expenditures by Secured Party for the maintenance, protection and preservation of the Collateral, and for the collection, repossession, holding, preparation and sale or other disposition of or realization upon the Collateral. In no event shall Secured Party have any obligation to make such expenditures nor any liability for failing to make them.

f. Governmental Charges. Debtor shall pay before delinquency all taxes, assessments and other governmental charges which are or may become a lien on any of the Collateral.

5. Defaults. Each of the following shall be a default ("Default") under this Agreement:

a. Any default or event of default on any of the Obligations, whether or not the Obligations have been accelerated; or

b. Breach of any representation or warranty contained in this Agreement; or

c. Any failure fully and timely to comply with any provision of this Agreement or of any other document, instrument or agreement between Debtor and Secured Party; or

d. Any levy, attachment or execution on, or seizure of, any of the Collateral;

e. Dissolution, death, termination of existence, insolvency or bankruptcy of Debtor or appointment of a receiver to take possession of any of the Collateral.

6. Rights and Remedies of Secured Party.

a. General. In addition to the rights and remedies granted to Secured Party in this Agreement, Secured Party shall at all times have the rights and remedies of a secured party under the Uniform Commercial Code as enacted in the state of Washington and under all other applicable laws.

b. Remedies. After the occurrence, and during the continuance, of a Default, Secured party may take any one or more of the following actions in its sole discretion:

(i) Declare all or any part of the Obligations due and payable, without presentment, demand, protest or other notice of any kind, all of which are expressly waived.

Debtor: UTM systems corp

(ii) Require the Debtor to assemble the Collateral, and make it available to Secured party at Debtor's premises or at any other location selected by Secured Party, where it will remain at Debtor's expense pending sale or other disposition. Debtor acknowledges and agrees that any failure by it to assemble the Collateral and make it available to Secured party will constitute a threat of imminent and irreparable harm to Secured party which will entitle Secured party to a court order or injunction: (A) appointing a receiver to take possession of the Collateral and sell or otherwise realize upon the Collateral and apply the proceeds to the Obligations; and/or (B) directing Debtor to assemble the Collateral and make it available to Secured party as required by this Security Agreement. Debtor expressly waives any right to require Secured Party to post a bond or other security or financial undertaking as a condition to obtaining any such order or injunction.

(iii) Sell, license, or otherwise dispose of the Collateral. If notice of sale or disposition of Collateral is required, ten (10) calendar days notice of any intended sale or other disposition of the Collateral shall be deemed to be reasonable. Each purchaser at any such sale shall hold the property sold absolutely free from any claim or right on the part of Debtor, and Debtor hereby waives (to the extent permitted by applicable law) all rights of redemption, stay and/or appraisal which it now has or may at any time in the future have under any rule of law or statute now existing or hereafter enacted. Secured Party shall not be obligated to make any sale of Collateral regardless of notice of sale having been given. Secured Party may adjourn any public or private sale from time to time by announcement at the time and place fixed therefor, and such sale may, without further notice, be made at the time and place to which it was so adjourned.

(iv) Indorse any assignment or other instrument or document with respect to the Collateral, as the attorney-in-fact for Debtor with full power of substitution.

(v) Accept and receive payment of, receipt for or defend, settle, compromise or adjust any claim, suit, action or proceeding with respect to the Collateral. In doing so, any determination made by Secured Party as to the risks of litigation and collectibility shall be deemed to be commercially reasonable unless made in bad faith.

c. Proceeds. The proceeds of sales, licenses, collections or other dispositions of the Collateral shall not be credited to the Obligations unless and until actually received in cash by Secured Party. Secured Party may credit such proceeds against the Obligations in such order as it elects in its sole discretion.

d. Deficiency. Debtor shall pay any deficiency remaining after application of the net proceeds of the Collateral to the Obligations.

e. Retention. Under no circumstances shall Secured Party be deemed to have elected to retain possession of all or any part of the Collateral in satisfaction of the Obligations unless Secured Party has given Debtor written notice of a proposal to do so pursuant to Revised Code of Washington 62A.9-505(2), regardless of the length of time the Collateral remains in Secured Party's possession after a Default. Under no circumstances shall Secured Party have any liability as a result of a decline in the market value of the Collateral while Secured Party holds it.

7. Power of Attorney. Debtor hereby appoints Secured Party, or any person or entity whom Secured Party may from time to time designate, as Debtor's attorney-in-fact with power, at any time after the occurrence of a Default: (a) to endorse Debtor's name on all applications,

Debtor: UTM systems corp

documents, papers and instruments necessary or appropriate for Secured Party to use, protect, register, patent, sell, license, assign, convey or otherwise transfer or dispose of any of the Collateral; (b) to notify the patent office authorities to change the address for delivery of Debtor's mail to an address designated by Secured Party; (c) to receive and to open and sort mail addressed to Debtor relating to the Collateral; (d) to do all other things which Secured party is permitted to do under this Agreement or which are necessary or appropriate to carry out this Agreement or other agreements between Debtor and Secured Party. Neither Secured Party nor any of its directors, officers, employees or agents will be liable for any acts of commission or omission or for any error in judgment or mistake of fact or law, unless the same shall have resulted from recklessness or willful misconduct. This power, being coupled with an interest, is irrevocable so long as this Agreement remains in effect. Debtor shall, from time to time, execute and deliver to Secured Party such additional documents as Secured Party may reasonably request to confirm the existence of the power of attorney granted herein and to provide additional originals thereof.

8. Revival of Security Interest. To the extent Debtor makes a payment to Secured Party or Secured Party receives any payment of proceeds of Collateral, which is later invalidated, declared to be a fraudulent transfer or preference, set aside or required to be repaid under any bankruptcy law, other law or equitable principle, Secured Party's interest in the Collateral shall be revived and continue as if the payment or proceeds had never been received by Secured Party .

9. Miscellaneous.

a. Financing Statements, Etc. Debtor will sign any financing statements, amendments, assignments, registrations or filings with governmental offices or agencies, and other documents necessary or appropriate to fully perfect Secured Party's security interests in the Collateral throughout the world. Debtor shall pay the cost of so perfecting such security interests. Secured Party is nevertheless authorized to file such documents without the Debtor's signature and Debtor hereby grants to Secured Party a power of attorney to execute any such documents as Debtor's attorney-in-fact. Such power of attorney is coupled with an interest and shall be irrevocable so long as this Agreement remains in effect.

b. Amendment. This Agreement and the other written documents, instruments and agreements entered into in connection with the loan and the Obligations contain the complete and final expression of the entire agreement of the parties. No provision of this Agreement may be amended, modified, waived or supplemented, except by a writing signed by the party sought to be charged with the amendment, modification, waiver or supplementation. No waiver by Secured party of any Default shall be a waiver of any other Default.

c. Remedies Cumulative. All rights and remedies of Secured Party shall be cumulative and may be exercised at such times and in such order as Secured Party determines, and no delay or omission in exercising any right or remedy shall be a waiver of it.

d. Effectiveness. This Agreement shall remain in full force and effect until (i) all of the Obligations shall have been indefeasibly paid in full in cash, and (ii) this Agreement shall have been terminated in writing by Secured Party .

e. Limitation of Consequential Damages. Secured party shall not be responsible for any lost profits of Debtor arising from any breach of contract, tort (excluding the Secured Party's recklessness or willful misconduct), or any other wrong arising from the establishment, administration or collection of the Obligations or the security interests granted in this Agreement.

Debtor: UTM systems corp

f. Legal Expenses. Debtor shall pay any and all fees, costs and expenses (including but not limited to fees of attorneys, accountants, experts, court reporters and others) incurred by Secured Party in the collection or enforcement of any of the Obligations (whether from or against the Debtor or any other person or entity liable therefor) and the perfection, preservation, protection and enforcement of its rights and remedies under this Agreement and its security interest in the Collateral, whether incurred before or after judgment, with or without suit, on appeal, in bankruptcy or other insolvency proceedings, or otherwise. Debtor shall pay all such fees, costs and expenses incurred by Secured Party in any bankruptcy case regardless of whether they are incurred in connection with issues of state law, bankruptcy law or otherwise. All amounts payable to Secured Party under this paragraph shall be payable upon demand and shall bear interest at 12% per annum.

g. Notices. Any notice under this Agreement shall be in writing.

h. Governing Law. This Security Agreement shall be governed by, and construed in accordance with the laws of the state of Washington without giving effect to their principles or provisions regarding conflicts of laws or choice of law.

i. No Obligation. This Security Agreement does not create a binding obligation by Secured Party to extend credit to Debtor at any time.

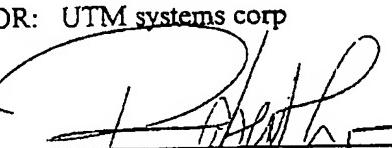
j. Counterparts. This Agreement may be executed in any number of counterparts and by each party on a separate counterpart, each of which when so executed and delivered shall be deemed an original and all of which taken together shall constitute but one and the same instrument.

h. Advice of Counsel. Debtor has sought and received advice of independent counsel before entering this Agreement.

IN WITNESS WHEREOF the parties have duly executed and delivered this Agreement as of the date first written above.

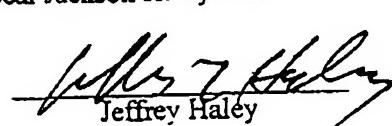
DEBTOR: UTM systems corp

By


Robert Lee President

SECURED PARTY:
Graybeal Jackson Haley LLP

By:


Jeffrey Haley

Witnessed by:



STEPHEN H. OLSON

Status of UTM Systems Corporation Patent Applications
April 1, 2001

1624-1-2	U.S. APPL. NO.:	09/322,670	DATE FILED: May 28, 1999
1624-2	U. S. APPL. NO.:	09/322,669	DATE FILED: May 28, 1999
1624-3-3	U. S. APPL. NO.:	09/560,842	DATE FILED: April 28, 2000
1624-3-4	PCT/US00/14449		DATE FILED: May 25, 2000
1624-3-5	Taiwan Appl. No.	89110220	DATE FILED: June 14, 2000.
1624-4-4	U. S. APPL. NO.:	09/580,321	DATE FILED: May 26, 2000
1624-4-PCT	PCT Application to be filed.		
1624-16-1	PCT/US00/14592		DATE FILED: May 26, 2000
1624-16-2	(US) waiting to file application based on pending PCT application.		
1624-17-1	PCT/US00/14591		DATE FILED: May 26, 2000
1624-17-2	(US) waiting to file application based on pending PCT application.		

TRADEMARK STATUS REPORT

UTM Systems Corporation
 (Client No. 1624)

<i>Country/ State*</i>	<i>Mark</i>	<i>Application No.</i>	<i>Application Date</i>	<i>Registration No.</i>	<i>Registration Date</i>	<i>Next Deadline</i>	<i>Action Required</i>	<i>Docket</i>	<i>Status/Other</i>
China	UNIVERSAL TELLER MACHINE	9900145056	1999/12/02					1624-9-4	ABANDONED
China	UTM		1999/12/02					1624-7-4	PENDING
China	UTM SYSTEMS ¹	9900145055	1999/12/02				Check status	1624-8-4	PENDING 7/5/00; response filed
European Union (CTM)	UNIVERSAL TELLER MACHINE	1367358				2000/12/05	Check status	1624-9-6	PENDING 6/5/00; published
European Union (CTM)	UTM	1367572	1999/11/02	1367572	1999/11/02	2004/11/02	Use due	1624-7-6	REGISTERED 11/2/2009; renewal
European Union (CTM)	UTM SYSTEMS	1367226				2000/12/05	Check status	1624-8-6	PENDING 6/5/00; published
Hong Kong	UNIVERSAL TELLER MACHINE	9916148	1999/11/08					1624-9-3	ABANDONED
Hong Kong	UTM	9916146	1999/11/08			2001/01/10	Check status	1624-7-3	PENDING
Hong Kong	UTM SYSTEMS	9916147	1999/11/08					1624-8-3	ABANDONED

TRADEMARK STATUS REPORT

UTM Systems Corporation
(Client No. 1624)

Country/ State**	Mark	Application No.	Application Date	Registration No.	Registration Date	Next Deadline	Action Required	Docket	Status/Other
Japan	UNIVERSAL TELLER MACHINE ⁱⁱ	11-98304	1999/11/01					1624-9-2	ABANDONED
Japan	UTM ⁱⁱⁱ	11-98302	1999/11/01			2001/05/11	Check status	1624-7-2	PENDING 11/8/00: response filed
Japan	UTM SYSTEMS ^{iv}	11-98303	1999/11/01					1624-8-2	ABANDONED
Mexico	UNIVERSAL TELLER MACHINE ^v	397299	1999/11/01	656405	1999/11/01	2009/11/01	Renewal	1624-9-5	REGISTERED
Mexico	UTM ^{vi}	397298	1999/11/01	656404	1999/11/01	2009/11/01	Renewal	1624-7-5	REGISTERED
Mexico	UTM SYSTEMS ^{vi}	397297	1999/11/01	656403	1999/11/01	2009/11/01	Renewal	1624-8-5	REGISTERED
Taiwan	UNIVERSAL TELLER MACHINE	88054370	1999/11/01					1624-9-7	ABANDONED
Taiwan	UTM	88054368	1999/11/01					1624-7-7	ABANDONED
Taiwan	UTM SYSTEMS	88054369	1999/11/01					1624-8-7	ABANDONED
United States	SIMPLY MORE SECURE	76/080,559	2000/06/29			2000/12/29	Priority deadline	1624-25-1	PENDING

TRADEMARK STATUS REPORT

UTM Systems Corporation
 (Client No. 1624)

Country/ State*	Mark	Application No.	Application Date	Registration No.	Registration Date	Next Deadline	Action Required	Docket	Status/Other
United States	UNIVERSAL TELLER MACHINE	75/646,952			2001/09/26	Check status	1624-9-1	ABANDONED 7/4/00: published	Abandoned/check to see if they want to revive in 6 months
United States	UTM ^{viii}	75/646,241	1999/02/19		2001/07/24	Check status	1624-7-1	PENDING SOU Filed 4/24/01	
United States	UTM SYSTEMS	75/646,236			2001/09/26	Check status	1624-8-1	ABANDONED 7/4/00: published	Check to see if they want to revive in 6 months

i Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices

ii Electrical communication machines and instruments; electronic machines and instruments and parts and accessories for these

iii Electrical communication machines and instruments

iv Electrical communication machines and instruments; electronic machines and instruments and parts and accessories for these

v Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices

vi Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices

vii Electronic devices with embedded authentication and encryption logic for incorporation in computers, telephones and other communication devices

viii Security and authentication devices, namely integrated circuit chips featuring embedded authentication and encryption logic for incorporation in computers, telephones and other communication devices

10/568097

IAP5 Rec'd PCT/PTO 10 FEB 2006

1 Hon. Karen A. Overstreet
2 Chapter 7
3 Hearing: April 22, 2005
4 9:30 a.m.

5 Exhibit
6 F
7
8

9 UNITED STATES BANKRUPTCY COURT
10 WESTERN DISTRICT OF WASHINGTON
11 AT SEATTLE

12 In re) No. 01-19563
13 UTM SYSTEMS CORPORATION,)
14 Debtor.) ORDER GRANTING GRAYBEAL
15) JACKSON & HALEY LLP RELIEF
16) FROM STAY
17)
18)
19)
20)
21)
22)
23)
24)
25)
26)
27)
28)

THIS MATTER having come before the Court on the motion of Graybeal Jackson & Haley LLP and the Court finding that notice and opportunity for a hearing were adequate under the circumstances, that no objection to the relief requested was filed by the response date, and good cause otherwise being shown, now, therefore, it is hereby

ORDERED as follows:

1. That the motion of Graybeal Jackson & Haley LLP for relief from stay be, and the same is hereby, granted.

2. That the automatic stay of 11 U.S.C. § 362(a) be, and the same is hereby, lifted to permit Graybeal Jackson & Haley LLP to pursue available remedies under nonbankruptcy law to realize upon the intellectual property listed on Exhibit A attached hereto.

3. That Graybeal Jackson & Haley LLP be, and the same is hereby, authorized to take any other action permitted under its security agreement which is not prohibited under nonbankruptcy law.

//

//

ORDER GRANTING GRAYBEAL JACKSON &
HALEY LLP RELIEF FROM STAY - 1

LAW OFFICE OF JOHN J. MITCHELL
811 First Ave., Suite 620
Seattle, WA 98104
(206) 903-8555

4. That the relief from stay granted herein be, and it is hereby, effective immediately upon the entry of this order, notwithstanding the provisions of Fed. R. Bankr. P. 4001(a)(3).

DATED the _____ day of April, 2005.

Karen L. Oestadt

KAREN A. OVERSTREET
United States Bankruptcy Judge

Presented by:

/s/ John J. Mitchell
WSBA No. 12757
Attorney for Graybeal Jackson Haley LLP

John Janeway

10/568097

From: John Janeway [jjaneway@graybeal.com]
Sent: Monday, October 10, 2005 5:10 PM
To: 'JeanOple@aol.com'
Subject: U.S. patent application revival and Declaration for your review and signature

Dear Ms. Ople:

I'm John Janeway, a patent attorney with Graybeal Jackson and Haley LLP (GJH). GJH has recently obtained ownership of a patent application on technology that you helped invent for UTM Systems Corp. GJH has obtained this application from the bankruptcy estate of UTM Systems Corp. and is now reviving it. To complete the revival, we ask you to please sign the Declaration attached below and then fax me the signed Declaration. Or, if you prefer, you can generate an Adobe Acrobat (.pdf) version of the declaration signed by you, and then email me the .pdf version.

The specific patent application (attached below) that we are reviving and that is referenced in the Declaration below is PCT/US00/14449, filed 25 May 2000, titled "THIN MAGNETIC MEDIUM READ HEAD". As you may recall, before UTM Systems entered bankruptcy you assigned UTM Systems Corp. all your rights to the patent application and the technology. And, you previously signed a declaration for the U.S. patent application on this technology that was filed before the PCT application was filed.

If you have any questions, please contact us.

We greatly appreciate your help and prompt consideration in this matter, and look forward to hearing from you shortly.

John M. Janeway
Associate Attorney
Graybeal Jackson Haley LLP
Phone: 425.455.5575
Fax: 425.455.1046
email: jjaneway@graybeal.com

Privileged/Confidential Information may be in this message. If you are not the intended addressee, please treat this message as confidential, contact me immediately, discard the message, and do not use or retain its contents. Thank you.

 2366-002-03
 PCTUS00144
claration.doc 9.pdf (852 Kf)

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 December 2000 (07.12.2000)

PCT

(10) International Publication Number
WO 00/74040 A1

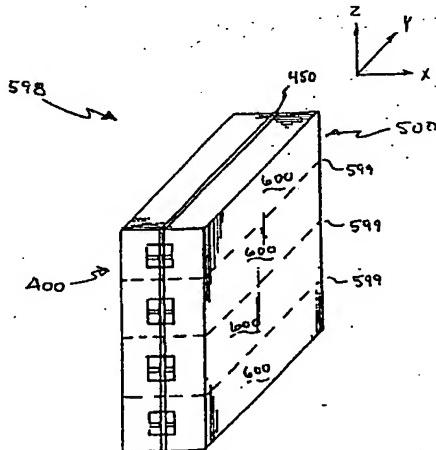
- (51) International Patent Classification⁷: G11B 5/147 (74) Agents: VILLANI, Christopher, B. et al.; Graybeal Jackson, Haley LLP, Suite 350, 155-108th Avenue Northeast, Bellevue, WA (US).
- (21) International Application Number: PCT/US00/14449 (81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW.
- (22) International Filing Date: 25 May 2000 (25.05.2000) (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/136,603 27 May 1999 (27.05.1999) US
09/560,842 28 April 2000 (28.04.2000) US
- (71) Applicant: UTM SYSTEMS CORP. [US/US]; Suite 1110, 10900 Northeast Eighth Street, Bellevue, WA 98004-4454 (US).
- (72) Inventors: OPLE, Angelina; 8206 Caminito Lacayo, La Jolla, CA 92037 (US). LEE, Robert; 717-140th Avenue Southeast, Bellevue, WA 98005 (US). HALEY, Jeffrey, T.; 4730-91st Avenue Southeast, Mercer Island, WA 98040-4440 (US).

Published:

— With international search report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THIN MAGNETIC MEDIUM READ HEAD



A1

WO 00/74040 A1

(57) Abstract: A thin film magnetic medium read head (600) is disclosed wherein the gap plane of the head is parallel to a plane generally defined by either the cores or the coils within the head structure. The read head comprises left and right core pieces (100, 200) of magnetic material, each core piece having a magnetic coil wound thereon and a flexible printed wiring board electrically connected to the coil, to form left and right core assemblies. The core assemblies are loaded edgewise into a plurality of slots (403a, 403b) formed in a pair of mirror image brackets, then a face of each bracket is machined so that the face is flush with an edge of the core assemblies. The two bracket (400) are then bonded to one another with a non-magnetic foil layer (450) between the bracket to establish a gap between opposing core assemblies. The brackets are then divided into separate heads along planes parallel to a plane parallel to the gap plane. A surface of each individual head parallel to the gap plane is then machined to expose a portion of the core assemblies and the gap.

WO 00/74040

PCT/US00/14449

THIN MAGNETIC MEDIUM READ HEAD

10/568097

RELATION TO PREVIOUS APPLICATION

This application claims priority to provisional patent application serial no.
5 60/136,603 filed on May 27, 1999.

FIELD OF THE INVENTION

The present invention relates to magnetic medium read heads and a methods of making such heads.

10

BACKGROUND OF THE INVENTION

Magnetic card readers have been widely used in many industries for magnetic strip reading. The advent of the global computer communications network, the Internet, and the growing use of private computer networks by banks and other financial institutions have created an even greater demand for small, lightweight and compact devices that can be used by individual consumers and corporate end-users to gain access to the myriad resources available on such networks. In an effort to satisfy the growing demand for access to computer communication resources via compact devices, such as, PCMCIA cards, devices contained in 3 ½ inch floppy disk sized packages, PIM's (Personal Information Managers), mobile phones, and HPC's (handheld PC's), the developers of electronic devices have been actively investigating ways to miniaturize the components used in the compact devices that are in constant demand by consumers and other end-users. One of the components that is useful for the creation of smaller, compact devices is a thin, low cost magnetic medium read head. Such a device lends itself to incorporation in products with a thin form factor. Unfortunately, the creation of smaller devices often entails greater manufacturing costs. As the need has grown for a greater variety of such devices, there has been a growth in the demand for smaller components and better manufacturing processes that permit components to be produced at lower costs and which provide performance that is better than or comparable to their larger counterparts.

Prior art magnetic read heads for reading magnetic stripes or magnetic tape are typically thicker in the dimension measured perpendicular to the plane of the

magnetic medium to be read than they are in a plane parallel to the magnetic medium. Fig. 1a illustrates a magnetic read head of conventional construction. The read head 10 is comprised of cores 12 that are shown in the illustration to be constructed of multiple plates. Wire coils 14 surround a portion of the cores 12. The 5 core/coil assemblies are fixed in a housing 15, indicated by the dashed outline, so that there is a gap 16 between opposing portions of the cores 12. As can be seen in Fig. 1a, the cores 12 generally define a plane, hereinafter the "core plane." In the case of conventional heads, the core plane is parallel to the 'z' and 'x' axes (or the z-x plane) shown in the figure. Similarly, the coils 14 each have a central axis, or 10 centerline. The centerlines of the coils generally define a plane, hereinafter the "coil plane." Again, in the case of conventional heads, the coil plane is parallel to the z-x plane. The gap 16 is defined herein to be in a plane on the surface of the head, the "gap plane," parallel to the 'y' and 'x' axes (or the y-x plane). The gap plane is then perpendicular to the core plane and the coil plane in conventional heads.

15 Fig. 1b illustrates a conventional prior art read head 10 in relationship to a magnetic medium. In this case the medium illustrated is a magnetic tape 18. As shown, the gap 16 is proximate the magnetic tape 18. In other words, the gap plane is parallel to the plane generally defined by the magnetic tape, hereinafter the "magnetic medium plane," which is also parallel to the y-x plane. It is evident that a 20 head of conventional construction, with the core plane perpendicular to the gap plane, will have considerable thickness in the "z" dimension. The smallest "z" dimension known in the art, for a head employing the conventional geometry discussed above, is approximately 0.26 inches (6.66 mm). A head of this thickness is inapplicable to many electronic package designs whose form factors call for an 25 even thinner "z" dimension.

For the foregoing reasons, there is a need for a thin magnetic read head wherein the read head is very thin in the "z" dimension, as illustrated in Figs. 2 and 3, and a process for inexpensively making such a read head.

30

SUMMARY OF THE INVENTION

The present invention is directed to a thin magnetic medium read head, and a process for manufacturing the read head, wherein the gap plane of the head is parallel to the core plane or the coil plane of the head, and these planes are parallel

- to the magnetic medium plane. Because the medium to be read is thin but long and wide, making the read head nearly as long or wide parallel to the magnetic medium does not present a size problem in a very small device, while making the read head thick, perpendicular to the magnetic medium, greatly increases the necessary size of
- 5 the device. Thus, a thin read head – thin in the dimension perpendicular to the magnetic medium (which, by definition herein, is perpendicular to the gap plane, core plane and coil plane) -- satisfies the current and foreseeable needs for miniaturized components in small, inexpensive electronic devices incorporating magnetic medium reading capabilities.
- 10 In accordance with one embodiment of the invention, left and right core pieces are cut and formed from magnetic material. A joggle bend, or offset, is formed in the top portion on one end of the core pieces to a desired angle depending on the thickness of a wire coil to be placed on the core piece. The core pieces are heat-treated using a desired temperature cycle and gas environment to recover their
- 15 magnetic properties after they have been fabricated. Magnetic coils are wound around one or both of the core pieces, forming core assemblies, to achieve the desired degree of induction from magnetic fields in the core pieces. Two mirror image brackets are formed from a non-magnetic material, and a plurality of slots are cut into each bracket to a desired depth and length. The core assemblies are
- 20 inserted edgewise into the slots of the two brackets and bonded to the brackets by a bonding agent. Wire leads from the coils on the core pieces are fed out of each bracket for further electrical connection. Once the core pieces are bonded to the brackets, the face of each bracket, and the edges of the core pieces contained therein, are machined flat to establish a bonding surface. A bonding agent is then
- 25 applied to the bonding surface of each bracket and the mirror image brackets are bonded to one another with a non-magnetic foil of a desired thickness disposed between the bonding surfaces of the brackets to establish a gap between opposing core pieces. The entire assembly is cured at a preferred temperature and pressure to create a unitized structure. After curing, the unitized structure is cut along planes
- 30 parallel to the core planes or coil planes into separate heads. The heads are ground or lapped to the desired thickness. As the head is ground and lapped, the top portion of each core piece contained within the head will be exposed. The exposed top portion contains the gap that will be in contact with the magnetic stripe on a card

or other magnetic media. The head is lapped to a contour that allows for the optimum contact between the gap and the magnetic media. After contouring, the head may be mounted in a card reader by various methods.

Another embodiment of the present invention is a two track read head. A flat flexible cable is electrically connected to the coil wires of two core assemblies placed end to end, thus forming dual core assemblies. The dual core assemblies are inserted into slots in brackets. The fabrication procedure described above is duplicated. Each head then has two gaps and electrical connection to related circuitry is made through a portion of the flexible cable extending from an end of each head.

An aspect of the invention is the overall thinness in the "z" dimension, i.e., perpendicular to the gap plane. In a preferred embodiment, the thinness is approximately 0.049". While an alternative embodiment has an overall thinness of 0.020".

15 Another aspect of the invention is that it has a small aspect ratio. The ratio of the "z" dimension of a preferred embodiment to the "y" or "x" dimension is approximately 0.073, while an alternative embodiment has an aspect ratio of 0.03.

20 BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1a is an oblique view of a prior art read head.

Fig. 1b is an oblique view of a prior art read head in contact with a magnetic tape.

Fig. 2 is an oblique view of a single track read head.

Fig. 3 is an oblique view of a dual track head.

Fig. 4 is an oblique view of the left and right core pieces without a joggle.

Fig. 5 is an oblique view of the left and right core assemblies.

Fig. 6 is an oblique view of a bracket for a single track head.

Fig. 7 is a top view of a portion of a bracket loaded with a core assembly

30 Fig. 8 is an end view of the unitized structure.

Fig. 9 depicts the planes along which the unitized structure is divided.

Fig. 10a is an oblique view of a single track read head.

Fig. 10b is an oblique view of an alternative embodiment of a single track read head.

Fig. 11 is an oblique view of a dual track head bracket.

5 Fig. 12 is a plan view of a flexible printed wiring board.

Fig. 13a is a plan view of a portion of a dual track head bracket loaded with a dual core assembly.

Fig. 13b is an elevation view of a dual track head bracket loaded with a dual core assembly.

10

DETAILED DESCRIPTION OF THE INVENTION

Fig. 4 shows a left core piece 100 and a right core piece 200, each piece having corresponding thickness "t", width "w" and length "l". The left core piece 100 and the right core piece 200 are manufactured from a magnetic alloy. In a preferred embodiment, the magnetic alloy typically consists of 80% nickel and 20% iron, referred to in the art as Permalloy, which is preferred due to its high permeability, low coercivity, high resistivity and high saturation induction. However, any other magnetic alloy known by those skilled in the art of creating magnetic read heads may be used in the core pieces 100, 200 to achieve the desired design and electrical signal characteristics.

The core pieces have three separate geometrical sections. Bottom sections 101, 201, middle sections 102, 202 and tapered top section 103, 203. In a preferred embodiment of the invention, the thickness "t" of cores 100, 200 is .010", the overall width "w" is .093", and the overall length "l" is .30". However, smaller dimensions are useful with the principal limitation being the components become very fragile and difficult to handle as the dimensions are reduced, in particular the thickness "t". An alternative embodiment employs a core with a thickness of .005".

Figure 5 depicts the core pieces 100, 200 having a joggle bend in the tapered portions 103, 203. (A joggle being a compound bend designed to offset portions of a flat, or planar, material, and keep the resultant planes parallel to one another.) The tapered section 103, 203 of the core pieces 100, 200 shown bent to an angle "A" of 36 degrees. However, the degree to which tapered sections 102, 203 are bent

102, 202. The joggle dimension 111, 211 is 0.036 inches in a preferred embodiment, although this dimension may vary according to the thickness of the wire coil and clearance requirements for the later machining steps. After forming, the core pieces 100, 200 are heat treated using a desired temperature and gas
5 environment to recover their magnetic properties.

Fig. 5 also shows the core pieces 100, 200 having an AWG 49 copper wire, commonly referred to as magnetic wire, winding or coil 110, 210 wound about middle sections 102, 202. The number of turns and wire gauge required in the coils 110, 210 will vary depending in part on the core materials, the strength of the magnetic
10 flux passing through the cores, and whether only one or both cores are wound with coils. Copper wire is typically used in read heads, but other applicable wire materials are known in the art. Wire of AWG 56 is known in the art and may be used to form coils 110, 210.

In Fig. 6, a left bracket for a single track head 400 is shown generally. In a
15 preferred embodiment of the present invention, the bracket 400 is made from aluminum 6061, commonly referred to as Al 6061, although other materials may be used to make the brackets such as plastic, ceramic or other non-magnetic materials known by those skilled in the art of producing magnetic read heads. The bracket 400 has a bonding face 401 with two raised edges 402a and 402b with a plurality of
20 opposing slots 403a and 403b. The overall dimensions of bracket 400 and the spacing of the slots 403a, 403b are variable depending on the machining techniques employed as will be obvious to one skilled in the art. However, the depth 404 of the slots 403a, 403b, is nominally the same as the width "w" of cores 100, 200 for reasons that will become apparent below. The width 406a of slots 403a is slightly
25 larger than the joggle dimension 111, 211 of cores 100, 200. The width 406b of slots 403b is slightly larger than the thickness "t" of the cores 100, 200. A right bracket 500 (not shown in Fig. 6) is a mirror image of bracket 400.

Fig. 7 is a top view of a portion of bracket 400 with showing a left core assembly 120, comprised of a left core 100 and left coil 110, inserted edgewise in
30 opposing slots 403a, 403b. The tapered section 103 is inserted in slot 403a, and the bottom section 101 is inserted in slot 403b. The coil assembly 120 is then bonded in place by epoxy or other bonding agent known in the art. After the bonding agent has cured, the bonding face 401 is machined flat, as by lapping or a similar process,

such that the core assembly edges 121 of the core assembly 120 and the bonding face 401 are co-planar. This process is repeated using a mirror image right bracket 500 and right core assemblies 220 comprised of right cores 200 and coils 210. (not shown)

- 5 Refer now to Fig. 8. A thin layer of foil 450 is secured between bonding faces 401 and 501 with a bonding agent. The foil 450 determines the thickness of gap 16 between opposing top sections 103, 203 of core assemblies 120, 220 contained within the bonded brackets as indicated by the dashed lines. The foil 450 may be made from copper, mica, or any other non-magnetic material known to those skilled
10 in the art of making electromagnetic reader heads. The thickness of the foil is 0.0005 inches in a preferred embodiment of the invention. However, gap forming foils ranging from 0.0001 to 0.0015 inches are known in the art.

- 15 Refer now to Fig. 9. After curing of the bonding agent, the unitized structure 598 comprising the brackets 400, 500 and the opposing pairs of core assemblies 120, 220 are divided into individual read heads 600 along planes 599 parallel to the y-x plane, preferably by cutting.

- 20 Refer now to Fig. 10a. After separating, individual heads 600 are machined by various grinding, lapping or polishing processes to finished dimensions. As the heads are machined thinner in the "z" dimension, the tapered sections 103, 203 are partially exposed. This exposed portion of the sections 103, 203 contains the gap 16. The gap face 601 containing the gap 16 generally defines the gap plane of the read head as discussed above in the Background section. The gap face 601 is further machined to a desired contour that allows for optimum contact between the gap and the magnetic medium. Bearing in mind that the coils 110, 210 contained
25 within the head have a thickness in the "z" dimension, it can now be better appreciated the need for a joggle, or offset, in the core pieces. This permits machining to expose the tapered sections 103, 203 without damaging the coils.

- 30 The present invention results in a read head with a very small dimension in the "z" dimension relative to prior art read heads because the core assemblies 120, 220 have been in effect rotated 90 degrees compared to the orientation of core assemblies within conventional read heads (Refer to Figs. 1a and 1b.)

An alternative embodiment is illustrated in Fig. 10b. In this case the core pieces do not have a joggle, or have a joggle of lesser thickness than the coils,

formed in tapered sections 103, 203. The machining steps to expose the top sections, are restricted to the portion of head 600 not containing the coils. A head fabricated in this manner can be used to read a magnetic medium such as a magnetic stripe located proximate an edge of a credit card. Because the thickness 5 of the card does not overlap the thickest point of the read head, the total thickness of the final device with a card slot can be thinner still.

An alternative embodiment of the present invention is a two track read head 700 shown generally in Fig. 3. The two track embodiment is similar in most respects to the single track embodiment previously disclosed. In a preferred embodiment, it 10 includes a flexible printed wiring board (PWB) 710a and 710b to provide electrical connection to the coils contained within the head. Gaps 16 are positioned relative to a magnetic medium (not shown) so that two tracks of encoded information can be read simultaneously.

Fig. 11 depicts left bracket 800. The bracket 800 is essentially a double width 15 version of bracket 400 described above, providing room in the slots 803 for receiving two core assemblies inserted end-to-end, i.e., tapered section-to-tapered section. A mirror image to left bracket 800 is right bracket 900 (not shown).

Fig. 12 is a plan view of flexible PWB 710a. The flexible PWB is constructed of 20 material and by techniques well known in the art. Electrical traces 711 are electrically connected to the wires forming coils 110, 210 (not shown) at locations identified by notches 712. The electrical traces conduct signals to pads 713 for further electrical connection to related circuitry. Flexible PWB 710b (not shown) is a mirror image of flexible PWB 710a.

Fig. 13a is a plan view of a portion of bracket 800 with slots 803 loaded with a 25 dual core assembly 1000 comprised of core assemblies 120, 220 and flexible PWB 710a connected to core assemblies 120, 220. Fig. 13b is a side view of the loaded bracket 800. The mirror image right bracket 900 is similarly loaded with dual core modules 1002 (not shown) which are mirror images of core modules 1000. The modules 1000, 1002 are then bonded to their respective brackets as described 30 previously.

The remaining manufacturing steps are the same as in the previously described single-track read head. The result is the dual-track read head illustrated in

Fig. 3. A single-track read head may be constructed using the flexible PWB described.

It will be apparent to those skilled in the art that other shapes and arrangements of the cores and coils are readily applicable to the invention with minor 5 modifications. For example, it is known in the art to make the cores in a generally horseshoe, or U-shaped. Such a shape will still generally define a plane analogous to the core plane defined above. A coil or coils wound about a horseshoe shaped core will still have an axial centerline that can also define a coil plane parallel to the gap plane. Therefore, a horseshoe shaped core assembly is useful in the present 10 invention as long as it is adaptable to the planar geometric relationships disclosed herein that provide for a thin read head. Similarly, only one of two cores may be wound with a coil.

Single or dual-track heads constructed according to the methods described herein can be used to construct heads with a "z" dimension, or thinness of 15 approximately 0.049 in a preferred embodiment while the thinness of an alternative embodiment is 0.020.

A useful means of comparing the prior art with the present invention is to consider dimensional aspect ratios. The thinness aspect ratios of particular interest are those of the "z" dimension divided by either the "x" or "y" dimensions of the head, 20 in other words, the z/x and z/y thinness aspect ratios. For thin read heads, having a small aspect ratio is preferable since that implies the thinness of the head in the "z" dimension is small thus making such a head more suitable for use in compact electronic devices. A preferred embodiment has an aspect ratio of approximately 0.073, while an alternative embodiment has an aspect ratio of 0.03. Whereas, the 25 smallest aspect ratio known is the prior art is approximately 1.15.

We claim:

1. A coil-type magnetic medium read head having at least one core, the core substantially defining a core plane, and a Z thinness dimension perpendicular to the core plane, wherein the Z thinness dimension is between .26 inches and .020 inches.
- 5 2. The read head of claim 1 wherein the Z thinness dimension is between 0.10 inches and .020 inches.
3. The read head of claim 1 wherein the Z thinness dimension is approximately .049 inches.
4. The read head of claim 1 wherein the Z thinness dimension is approximately .020 inches.
- 10 5. A coil-type magnetic medium read head having at least one coil, the coil substantially defining a coil plane, and a Z thinness dimension perpendicular to the coil plane, wherein the Z thinness dimension is between .26 inches and .020 inches.
6. The read head of claim 5 wherein the Z thinness dimension is between 0.10 inches and .020 inches.
- 15 7. The read head of claim 5 wherein the Z thinness dimension is approximately .049 inches.
8. The read head of claim 5 wherein the Z thinness dimension is approximately .020 inches.
- 20 9. A thin coil-type magnetic medium read head for reading a magnetically coded medium having an X dimension parallel to a gap plane, a Y dimension parallel to the gap plane and perpendicular to the X dimension, and a Z dimension perpendicular to the gap plane and the X and Y dimensions, wherein the thinness aspect ratio of Z/X is less than 1/1 and the thinness aspect ratio of Z/Y is less than 1/1.
- 25 10. The head of claim 9 wherein either the Z/X or the Z/Y thinness aspect ratio is less than 1/5.
11. The head of claim 9 wherein either the Z/X or the Z/Y thinness aspect ratio is less than 1/12.
- 30 12. The head of claim 9 wherein either the Z/X or the Z/Y thinness aspect ratio is less than 1/30.
13. A thin coil-type magnetic medium read head wherein a gap plane is substantially parallel to a coil plane.
14. A thin coil-type magnetic medium read head wherein a gap plane is substantially parallel to a core plane.

15. A process for making a thin magnetic medium read head, the head having at least one coil therein, the coil defining a coil plane, comprising:

- (a) loading a slot in a left bracket with a left core assembly and a slot in a right bracket with a right core assembly;
 - 5 (b) bonding the left core assembly and the right core assembly to its respective bracket with a bonding agent;
 - (c) machining on the left bracket a left bonding surface proximate the slot therein, and on the right bracket a right bonding surface proximate the slot therein, whereby an edge of each core assembly in its respective slot is flush with its
10 respective bonding surface;
 - (d) positioning the left and right brackets with a foil placed between each bonding surface, and the left and right brackets being positioned such that the left core assembly is substantially co-planar with the right core assembly;
 - 15 (e) bonding the bonding surfaces and foil together with a bonding agent to create a unitized structure with sufficient pressure that the foil forms a gap between the left core assembly and the right core assembly substantially equal to the thickness of the foil; and
 - (f) machining a side of the unitized structure substantially parallel to a coil plane whereby a portion of the core assembly is exposed thus exposing the gap.
- 20 16. A process for making a plurality of thin magnetic medium read heads, each head having at least one coil therein, the coil defining a coil plane, comprising:
- (a) loading each of a plurality of slots in a left bracket with a left dual core assembly, and a plurality of slots in a right bracket with a right dual core assembly;
 - 25 (b) bonding the left dual core assemblies and the right dual core assemblies to their respective brackets with a bonding agent;
 - (c) machining on the left bracket a left bonding surface proximate the slots therein, and on the right bracket a right bonding surface proximate the slots therein, whereby an edge of each left and right dual core assembly in its respective slot is flush with its respective bonding surface;
 - 30 (d) positioning the left and right brackets with a foil placed between each bonding surface, and the left and right brackets being positioned such that each left dual core assembly is substantially co-planar with a corresponding right dual core assembly;
 - (e) bonding the left and right bonding surfaces and foil together with a bonding agent to create a unitized structure with sufficient pressure that the foil forms
35

- a plurality of gaps, each gap between the left dual core assembly and the right dual core assembly being substantially equal to the thickness of the foil;
- (f) dividing the unitized structure into individual heads;
- (g) machining a side of each head substantially parallel to a coil plane
- 5 whereby a portion of the left and right dual core assemblies therein are exposed, thus exposing one or more of the plurality of gaps.
17. A process for making a thin magnetic medium read head, the head having at least one core therein, the core defining a core plane, comprising:
- (a) loading a slot in a left bracket with a left core assembly and a slot in a right bracket with a right core assembly;
- (b) bonding the left core assembly and the right core assembly to its respective bracket with a bonding agent;
- (c) machining on the left bracket a left bonding surface proximate the slot therein, and on the right bracket a right bonding surface proximate the slot therein, whereby an edge of each core assembly in its respective slot is flush with its respective bonding surface;
- (d) positioning the left and right brackets with a foil placed between each bonding surface, and the left and right brackets being positioned such that the left core assembly is substantially co-planar with the right core assembly;
- (e) bonding the bonding surfaces and foil together with a bonding agent to create a unitized structure with sufficient pressure that the foil forms a gap between the left core assembly and the right core assembly substantially equal to the thickness of the foil; and
- (f) machining a side of the unitized structure substantially parallel to a core plane whereby a portion of the core assembly is exposed thus exposing the gap.
18. A process for making a plurality of thin magnetic medium read heads, each head having at least one core therein, the core defining a core plane, comprising:
- (a) loading a plurality of slots in a left bracket with a left dual core assemblies, and a plurality of slots in a right bracket with a right dual core assemblies;
- (b) bonding the left dual core assemblies and the right dual core assemblies to their respective bracket with a bonding agent;
- (c) machining on the left bracket a left bonding surface proximate the slots therein, and on the right bracket a right bonding surface proximate the slots

therein, whereby an edge of each left and right dual core assembly in its respective slot is flush with its respective bonding surface;

- 5 (d) positioning the left and right brackets with a foil placed between each bonding surface, and the left and right brackets being positioned such that each left dual core assembly is substantially co-planar with the corresponding right dual core assembly;
- 10 (e) bonding the left and right bonding surfaces and foil together with a bonding agent to create a unitized structure with sufficient pressure that the foil forms a plurality of gaps, each gap between the left dual core assembly and the right dual core assembly being substantially equal to the thickness of the foil;
- 15 (f) dividing the unitized structure into individual heads;
- (g) machining a side of the unitized structure parallel to a core plane whereby a portion of the left and right dual core assemblies therein are exposed, thus exposing one or more of the plurality of gaps.
19. A thin magnetic medium read head manufactured by a process comprising the steps in claim 15.
20. A thin magnetic medium read head manufactured by a process comprising the steps in claim 16.

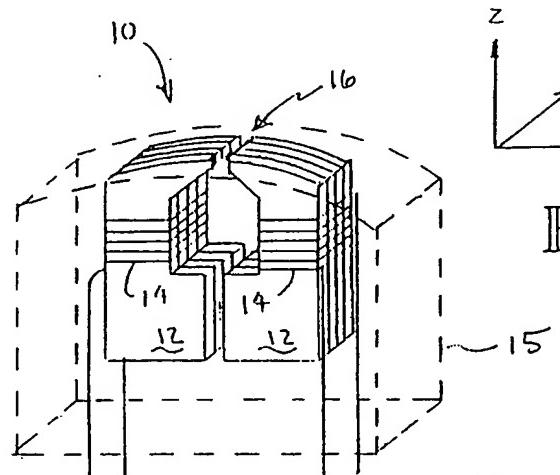


FIG. 1A

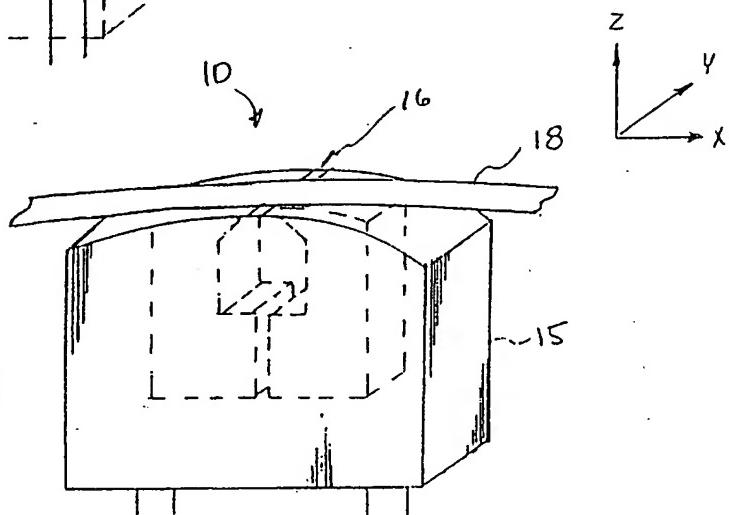


FIG. 1B

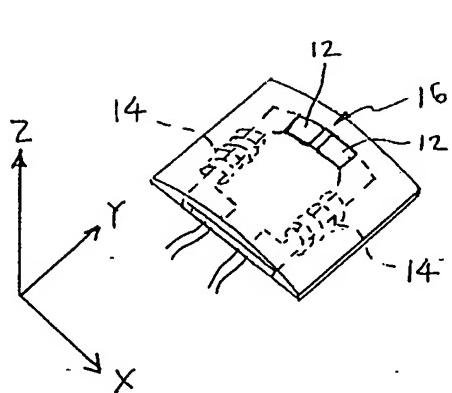


FIG. 2

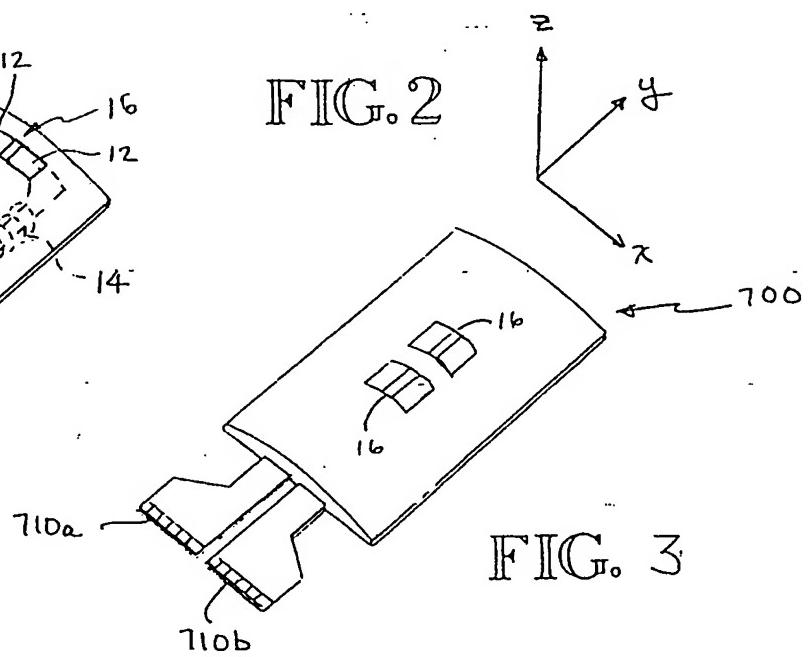
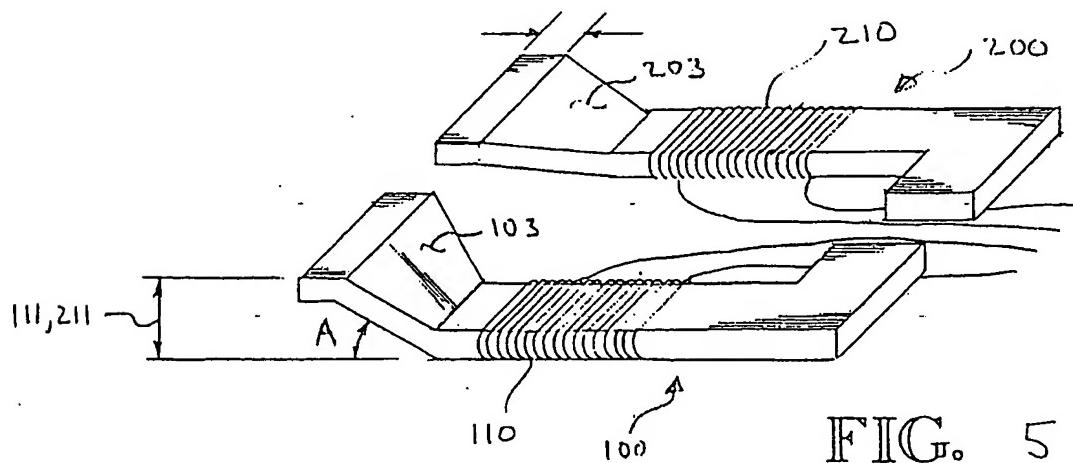
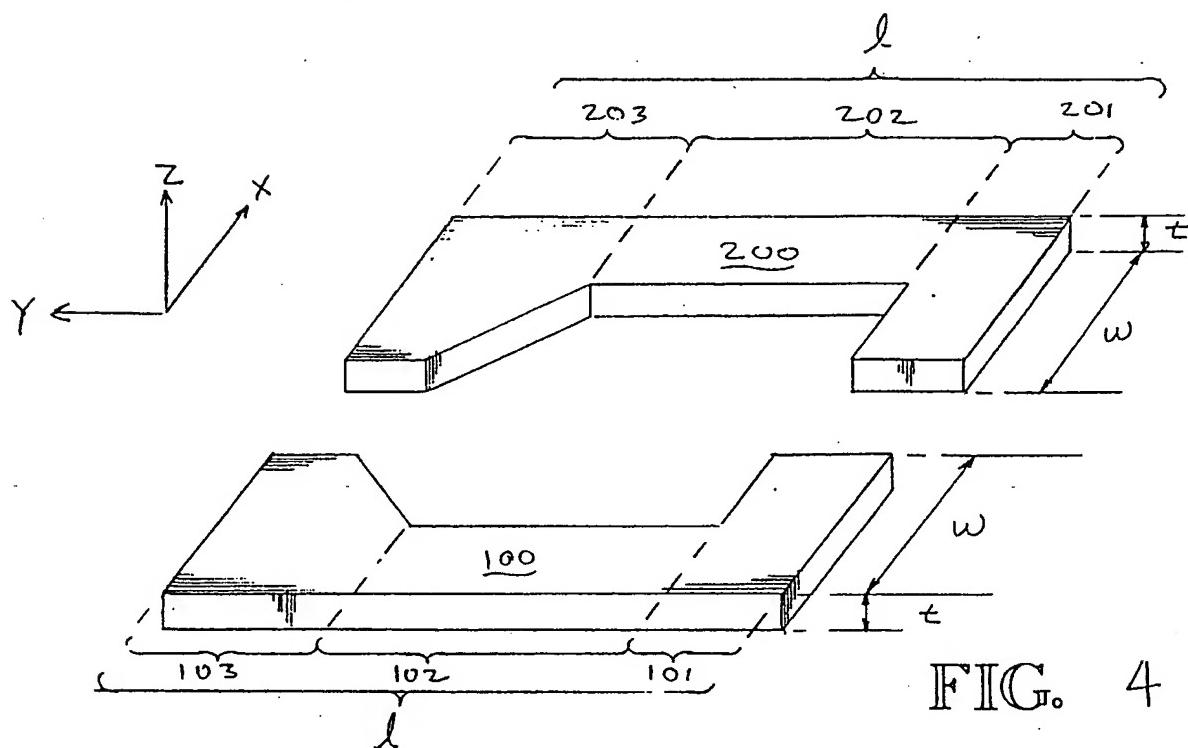


FIG. 3

2 / 6



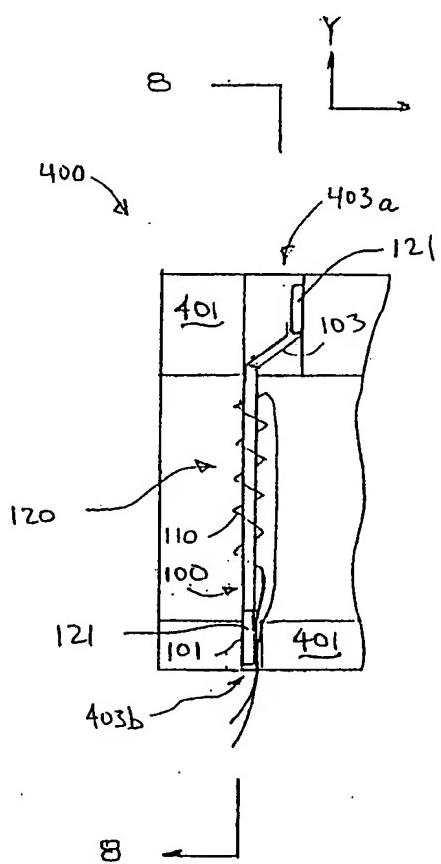


FIG. 7

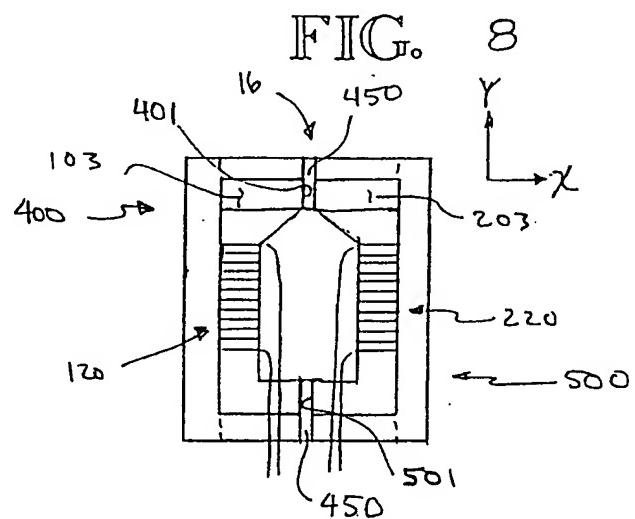


FIG. 8

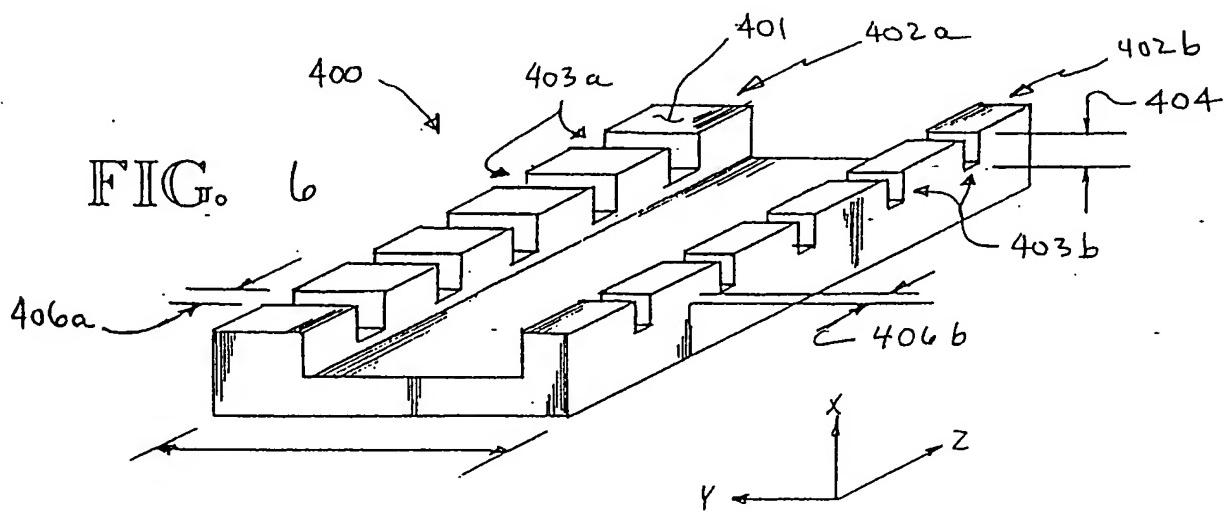


FIG. 6

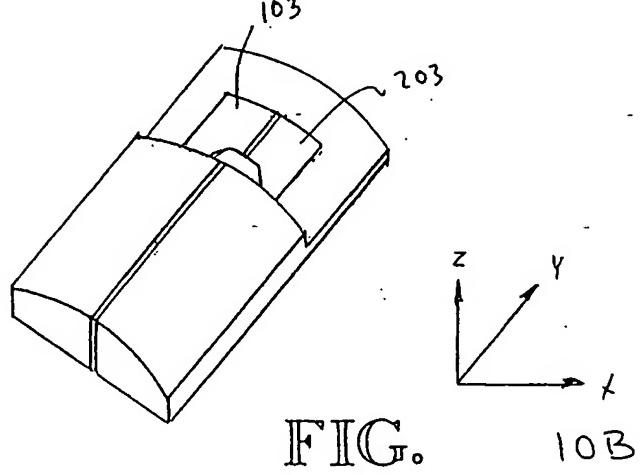
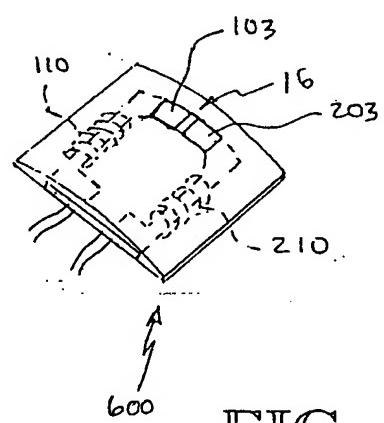
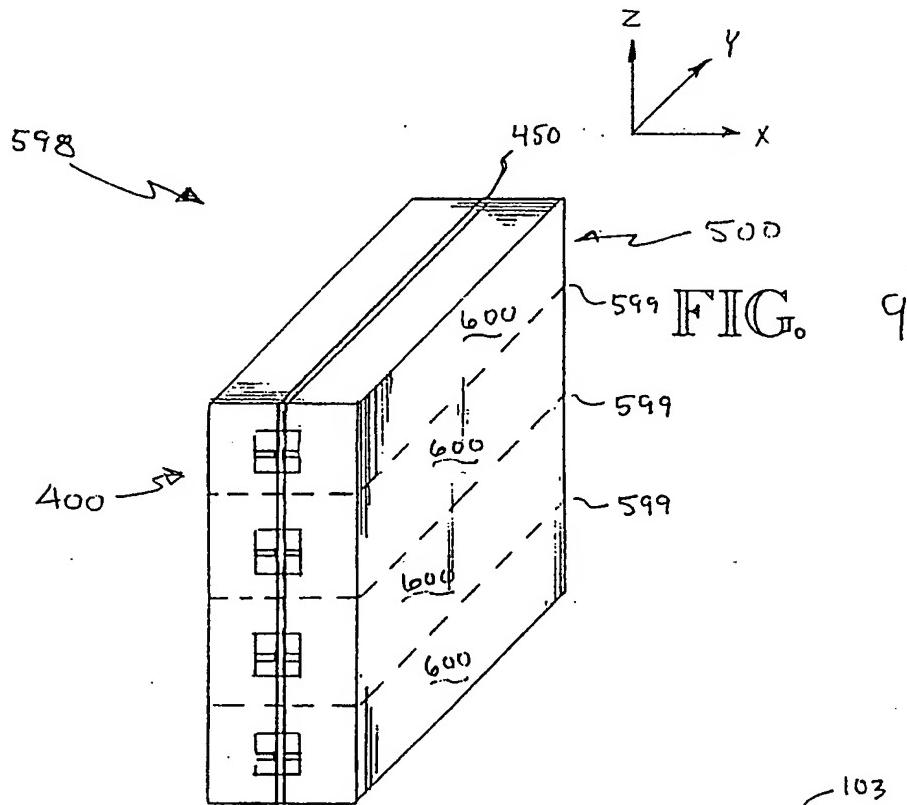


FIG. 11

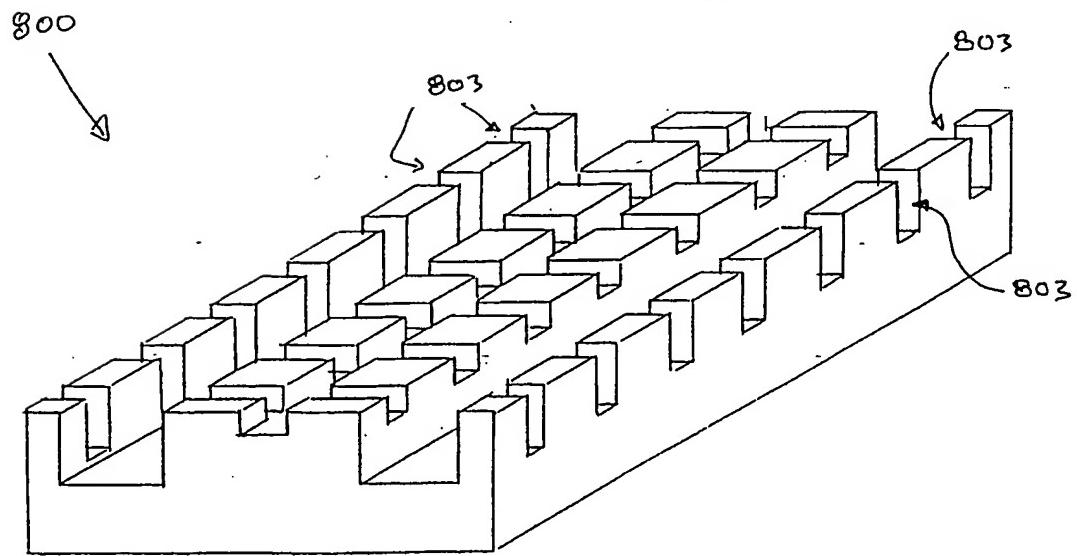


FIG.12

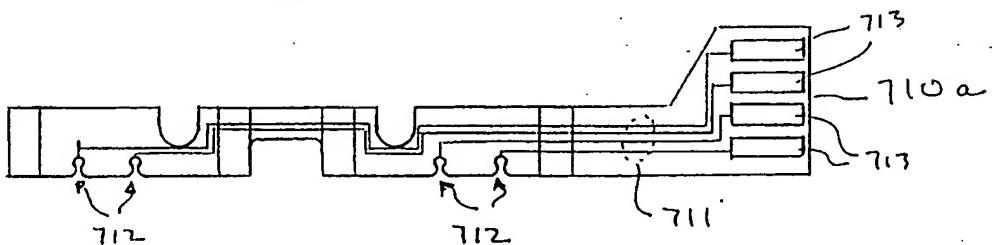


FIG.13A

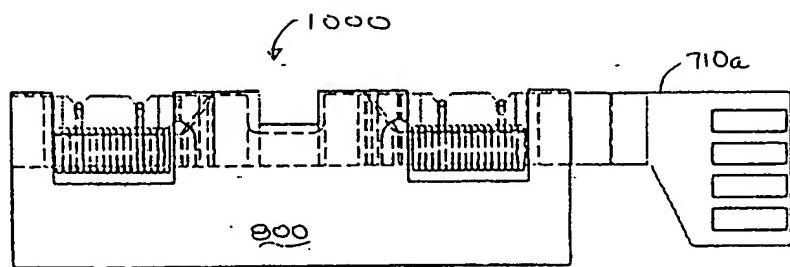
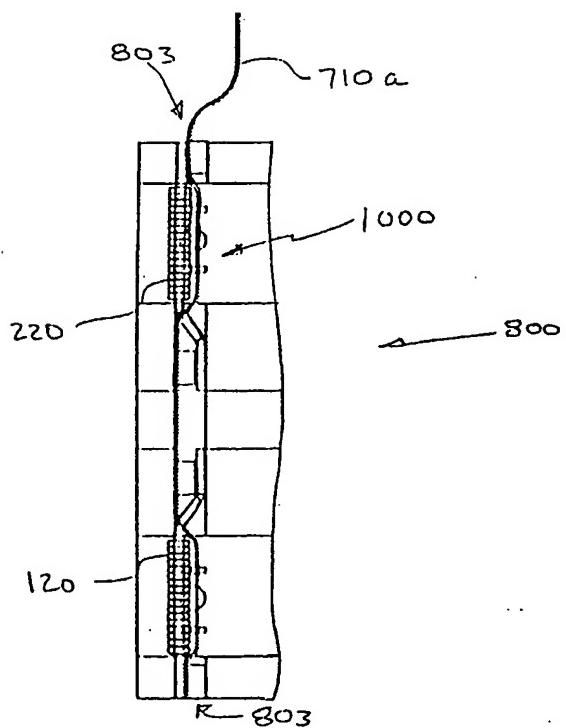


FIG.13B

INTERNATIONAL SEARCH REPORT

International application No. PCT/US00/14449

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :G11B.5/147
US CL :360/126, 121, 122, 125, 119

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 360/126, 121, 122, 125, 119

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,839,763 A (MATSUZAWA) 13 June 1989, figure 1	1-20
X	US 4,816,949 A (YAMADA et al) 28 March 1989, figure 3	1-20
X	US 4,811,146 A (NIWA) 07 March 1989, figures 1 and 3-5	1-20
X	US 4,819,113 A (KUBOTA et al) 04 April 1989, figures 1 and 5	1-20
X,E	US 6,072,669 A (INDECK) 06 June 2000, figures 1, and 4-6	1-20

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
B earlier document published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means		
P document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search
13 AUGUST 2000

Date of mailing of the international search report
18 SEP 2000

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231
Facsimile No. (703) 305-3230

Authorized Officer
[Signature]
ALLEN CAO
Telephone No. (703) 305-3796

Status of UTM Systems Corporation Patent Applications
April 1, 2001

1624-1-2	U.S. APPL. NO.:	09/322,670	DATE FILED: May 28, 1999
1624-2	U. S. APPL. NO.:	09/322,669	DATE FILED: May 28, 1999
1624-3-3	U. S. APPL. NO.:	09/560,842	DATE FILED: April 28, 2000
1624-3-4	PCT/US00/14449		DATE FILED: May 25, 2000
1624-3-5	Taiwan Appl. No.	89110220	DATE FILED: June 14, 2000.
1624-4-4	U. S. APPL. NO.:	09/580,321	DATE FILED: May 26, 2000
1624-4-PCT	PCT Application to be filed.		
1624-16-1	PCT/US00/14592		DATE FILED: May 26, 2000
1624-16-2	(US) waiting to file application based on pending PCT application.		
1624-17-1	PCT/US00/14591		DATE FILED: May 26, 2000
1624-17-2	(US) waiting to file application based on pending PCT application.		

TRADEMARK STATUS REPORT

UTM Systems Corporation
(Client No. 1624)

<i>Country/ State*</i>	<i>Mark</i>	<i>Application No.</i>	<i>Application Date</i>	<i>Registration No.</i>	<i>Registration Date</i>	<i>Next Deadline</i>	<i>Action Required</i>	<i>Docket</i>	<i>Status/Other</i>
China	UNIVERSAL TELLER MACHINE	9900145056	1999/12/02					1624-9-4	ABANDONED
China	UTM		1999/12/02					1624-7-4	PENDING
China	UTM SYSTEMS ¹	9900145055	1999/12/02				Check status	1624-8-4	PENDING 7/5/00: response filed
European Union (CTM)	UNIVERSAL TELLER MACHINE	1367358				2000/12/05	Check status	1624-9-6	PENDING 6/5/00: published
European Union (CTM)	UTM	1367572	1999/11/02	1367572	1999/11/02	2004/11/02	Use due	1624-7-6	REGISTERED 1/2/2009: renewal
European Union (CTM)	UTM SYSTEMS	1367226				2000/12/05	Check status	1624-8-6	PENDING 6/5/00: published
Hong Kong	UNIVERSAL TELLER MACHINE	99/16148	1999/11/08					1624-9-3	ABANDONED
Hong Kong	UTM	99/16146	1999/11/08			2001/01/10	Check status	1624-7-3	PENDING
Hong Kong	UTM SYSTEMS	99/16147	1999/11/08					1624-8-3	ABANDONED

TRADEMARK STATUS REPORT
UTM Systems Corporation
 (Client No. 1624)

Country/ State*	Mark	Application No.	Application Date	Registration No.	Registration Date	Next Deadline	Action Required	Docket	Status/Other
Japan	UNIVERSAL TELLER MACHINE™	11-98904	1999/11/01					1624-9-2	ABANDONED
Japan	UTM™	11-98902	1999/11/01			2001/05/11	Check status	1624-7-2	PENDING 11/8/00: response filed
Japan	UTM SYSTEMS™	11-98903	1999/11/01					1624-8-2	ABANDONED
Mexico	UNIVERSAL TELLER MACHINE™	397299	1999/11/01	656405	1999/11/01	2009/11/01	Renewal	1624-9-5	REGISTERED
Mexico	UTM™	397298	1999/11/01	656404	1999/11/01	2009/11/01	Renewal	1624-7-5	REGISTERED
Mexico	UTM SYSTEMS™	397297	1999/11/01	656403	1999/11/01	2009/11/01	Renewal	1624-8-5	REGISTERED
Taiwan	UNIVERSAL TELLER MACHINE	88054370	1999/11/01					1624-9-7	ABANDONED
Taiwan	UTM	88054368	1999/11/01					1624-7-7	ABANDONED
Taiwan	UTM SYSTEMS	88054369	1999/11/01					1624-8-7	ABANDONED
United States	SIMPLY MORE SECURE	76080,559	2000/06/29			2000/12/29	Priority deadline	1624-25-1	PENDING

TRADEMARK STATUS REPORT

UTM Systems Corporation
(Client No. 1624)

Country/ State*	Mark	Application No.	Application Date	Registration No.	Registration Date	Next Deadline	Action Required	Docket	Status/Other
United States	UNIVERSAL TELLER MACHINE	75/646,952				2001/09/26	Check status	1624-9-1	ABANDONED 7/4/00: published
United States	UTM ^{viii}	75/646,241	1999/02/19			2001/07/24	Check status	1624-7-1	PENDING SOU Filed 4/24/01
United States	UTM SYSTEMS	75/646,236				2001/09/26	Check status	1624-8-1	ABANDONED 7/4/00: published
									Check to see if they want to revive in 6 months

ⁱ Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices

ⁱⁱ Electrical communication machines and instruments; electronic machines and instruments and parts and accessories for these

ⁱⁱⁱ Electrical communication machines and instruments; electronic machines and instruments and parts and accessories for these

^{iv} Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices

^v Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices

^{vi} Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices

^{vii} Security and authentication devices, namely integrated circuit chips featuring embedded authentication and encryption logic for incorporation in computers, telephones and other communication devices

Status of UTM Systems Corporation Patent Applications
April 1, 2001

1624-1-2	U.S. APPL. NO.:	09/322,670	DATE FILED: May 28, 1999
1624-2	U. S. APPL. NO.:	09/322,669	DATE FILED: May 28, 1999
1624-3-3	U. S. APPL. NO.:	09/560,842	DATE FILED: April 28, 2000
1624-3-4	PCT/US00/14449		DATE FILED: May 25, 2000
1624-3-5	Taiwan Appl. No.	89110220	DATE FILED: June 14, 2000.
1624-4-4	U. S. APPL. NO.:	09/580,321	DATE FILED: May 26, 2000
1624-4-PCT	PCT Application to be filed.		
1624-16-1	PCT/US00/14592		DATE FILED: May 26, 2000
1624-16-2	(US) waiting to file application based on pending PCT application.		
1624-17-1	PCT/US00/14591		DATE FILED: May 26, 2000
1624-17-2	(US) waiting to file application based on pending PCT application.		

TRADEMARK STATUS REPORT

UTM Systems Corporation
(Client No. 1624)

<i>Country/ State*</i>	<i>Mark</i>	<i>Application No.</i>	<i>Application Date</i>	<i>Registration No.</i>	<i>Registration Date</i>	<i>Next Deadline</i>	<i>Action Required</i>	<i>Docket</i>	<i>Status/Other</i>
China	UNIVERSAL TELLER MACHINE	9900145056	1999/12/02					1624-9-4	ABANDONED
China	UTM		1999/12/02					1624-7-4	PENDING
China	UTM SYSTEMS ⁱ	9900145055	1999/12/02				Check status	1624-8-4	PENDING 7/5/00: response filed
European Union (CTM)	UNIVERSAL TELLER MACHINE	1367358				2000/12/05	Check status	1624-9-6	PENDING 6/5/00: published
European Union (CTM)	UTM	1367572	1999/11/02	1367572	1999/11/02	2004/11/02	Use due	1624-7-6	REGISTERED 11/22/2009; renewal
European Union (CTM)	UTM SYSTEMS	1367226				2000/12/05	Check status	1624-8-6	PENDING 6/5/00: published
Hong Kong	UNIVERSAL TELLER MACHINE	99/16148	1999/11/08					1624-9-3	ABANDONED
Hong Kong	UTM	99/16146	1999/11/08			2000/01/10	Check status	1624-7-3	PENDING
Hong Kong	UTM SYSTEMS	99/16147	1999/11/08					1624-8-3	ABANDONED

TRADEMARK STATUS REPORT

UTM Systems Corporation
(Client No. 1624)

<i>Country/ State*</i>	<i>Mark</i>	<i>Application No.</i>	<i>Application Date</i>	<i>Registration No.</i>	<i>Registration Date</i>	<i>Next Deadline</i>	<i>Action Required</i>	<i>Docket</i>	<i>Status/Other</i>
Japan	UNIVERSAL TELLER MACHINE ⁱⁱ	11-98904	1999/11/01					1624-9-2	ABANDONED
Japan	UTM ⁱⁱⁱ	11-98902	1999/11/01			2001/05/11	Check status	1624-7-2	PENDING 11/8/00; response filed
Japan	UTM SYSTEMS ^{iv}	11-98903	1999/11/01					1624-8-2	ABANDONED
Mexico	UNIVERSAL TELLER MACHINE ^v	397299	1999/11/01	656405	1999/11/01	2009/11/01	Renewal	1624-9-5	REGISTERED
Mexico	UTM ^{vi}	397298	1999/11/01	656404	1999/11/01	2009/11/01	Renewal	1624-7-5	REGISTERED
Mexico	UTM SYSTEMS ^{vii}	397297	1999/11/01	656403	1999/11/01	2009/11/01	Renewal	1624-8-5	REGISTERED
Taiwan	UNIVERSAL TELLER MACHINE	88054370	1999/11/01					1624-9-7	ABANDONED
Taiwan	UTM	88054368	1999/11/01					1624-7-7	ABANDONED
Taiwan	UTM SYSTEMS	88054369	1999/11/01					1624-8-7	ABANDONED
United States	SIMPLY MORE SECURE	76/080,559	2000/06/29			2000/12/29	Priority deadline	1624-25-1	PENDING

TRADEMARK STATUS REPORT

UTM Systems Corporation
(Client No. 1624)

<i>Country/ State*</i>	<i>Mark</i>	<i>Application No.</i>	<i>Application Date</i>	<i>Registration No.</i>	<i>Registration Date</i>	<i>Next Deadline</i>	<i>Action Required</i>	<i>Docket</i>	<i>Status/Other</i>
United States	UNIVERSAL TELLER MACHINE	75/646,952			2001/09/26	Check status	1624-9-1	ABANDONED 7/4/00: published	Abandoned/check to see if they want to revive in 6 months
United States	UTM ^{viii}	75/646,241	1999/02/19		2001/07/24	Check status	1624-7-1	PENDING SOU Filed 4/24/01	
United States	UTM SYSTEMS	75/646,236			2001/09/26	Check status	1624-8-1	ABANDONED 7/4/00: published	Check to see if they want to revive in 6 months

- ⁱ Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- ⁱⁱ Electrical communication machines and instruments; electronic machines and instruments and parts and accessories for these
- ⁱⁱⁱ Electrical communication machines and instruments
- ^{iv} Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- ^v Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- ^{vi} Electronic devices with embedded authentication and encryption microprocessors for connection to or embedding within computers, telephones and other communication devices
- ^{vii} Security and authentication devices, namely integrated circuit chips featuring embedded authentication and encryption logic for incorporation in computers, telephones and other communication devices

1
2
3
4
5
6
7
8
9 Hon. Karen A. Overstreet
Chapter 7
Hearing: April 22, 2005
9:30 a.m.

10
11
12
13
14
15 UNITED STATES BANKRUPTCY COURT
16 WESTERN DISTRICT OF WASHINGTON
17 AT SEATTLE

In re } No. 01-19563
18 UTM SYSTEMS CORPORATION, }
Debtor. } ORDER GRANTING GRAYBEAL
} JACKSON & HALEY LLP RELIEF
} FROM STAY
} (PROPOSED)

19 THIS MATTER having come before the Court on the motion of Graybeal Jackson & Haley LLP
20 and the Court finding that notice and opportunity for a hearing were adequate under the circumstance,
21 that no objection to the relief requested was filed by the response date, and good cause otherwise being
22 shown, now, therefore, it is hereby

23 ORDERED as follows:

24 1. That the motion of Graybeal Jackson & Haley LLP for relief from stay be, and the same
is hereby, granted.

25 2. That the automatic stay of 11 U.S.C. § 362(a) be, and the same is hereby, lifted to permit
Graybeal Jackson & Haley LLP to pursue available remedies under nonbankruptcy law to realize upon
the intellectual property listed on Exhibit A attached hereto.

26 3. That Graybeal Jackson & Haley LLP be, and the same is hereby, authorized to take any
other action permitted under its security agreement which is not prohibited under nonbankruptcy law.

27 //

28 //

ORDER GRANTING GRAYBEAL JACKSON &
HALEY LLP RELIEF FROM STAY - 1

LAW OFFICE OF JOHN J. MITCHELL
811 First Ave., Suite 620
Seattle, WA 98104
(206) 903-8555

1 4. That the relief from stay granted herein be, and it is hereby, effective immediately upon
2 the entry of this order, notwithstanding the provisions of Fed. R. Bankr. P. 4001(a)(3).

3 DATED the _____ day of April, 2005.

4
5
6 KAREN A. OVERSTREET
7 United States Bankruptcy Judge

8
9 Presented by:

10
11 John J. Mitchell
12 WSBA No. 12757
13 Attorney for Graybeal Jackson Haley LLP

DECLARATION OF JOHN M. JANEWAY

I, John M. Janeway, hereby declare the following:

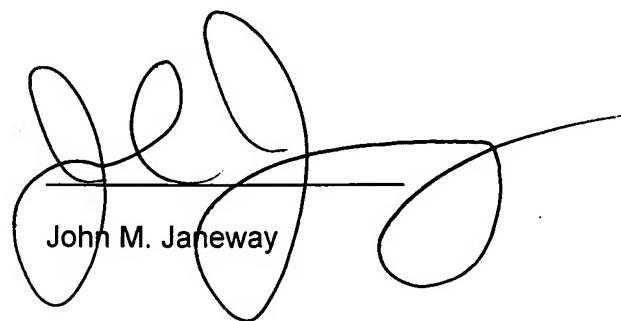
1. I am an attorney at Graybeal Jackson Haley LLP, 155-108th Avenue N.E., Suite 350, Bellevue, WA 98004-5973 (425) 455-5575, and am registered to practice before the U.S. Patent and Trademark Office (Registration No. 45,796). I am a patent attorney representing Graybeal Jackson Haley LLP, regarding the revival of the National Stage patent application titled THIN MAGNETIC MEDIUM READ HEAD, from the patent application filed under the Patent Cooperation Treaty on 25 May 2000 having the international application number PCT/US00/14449 and titled, THIN MAGNETIC MEDIUM READ HEAD.
2. The application PCT/US00/14449 names the following inventors: Messrs. Robert Lee and Jeffrey T. Haley, and Ms. Angelina Ople. A copy of the application PCT/US00/14449, as published by the World Intellectual Property Organization and identified as WO 00/74040 A1, is attached as Exhibit A. The first page of WO 00/74040 lists the filing date, application number and inventors.
3. On 10 October 2005 I sent, via email, to Ms. Ople a request for her to join in the revival of the National Stage patent application. I attached to the request a copy of the application PCT/US00/14449 and a declaration for her signature to complete the revival. A copy of the email from me to Ms. Ople and the declaration attached to the email are attached as Exhibit B. A copy of the application PCT/US00/14449, as published by the World Intellectual Property Organization and identified as WO 00/74040 A1, that was attached to my email dated 10 October 2005 is attached as Exhibit A, which was introduced in paragraph 2.

4. On 02 November 2005 Mr. Mark Ople and I discussed over the telephone, my email to Ms. Ople dated 10 October 2005, and the application and declaration attached to the email. During the discussion, Mr. Ople stated that he was Ms. Ople's son, that he is an attorney, and that Ms. Ople received my email dated 10 October 2005.

5. On 07 November 2005 Mr. Ople stated to me over the telephone that Ms. Angelina Ople refuses to sign the declaration.

6. I further declare that all statements made herein of my own knowledge are true; that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like, if so made, are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signed this ^{7th} day of February 2006.



John M. Janeway

A handwritten signature consisting of several loops and curves, resembling a stylized 'J' or 'M'. Below the signature, the name "John M. Janeway" is printed in a standard font.

PATENT

**DECLARATION AND POWER OF ATTORNEY
IN PATENT APPLICATION**

Attorney Docket No.: 2366-002-03

As a below named inventor, I hereby declare:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am an original, first and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled:

THIN MAGNETIC MEDIUM READ HEAD

the specification of which

- is attached hereto.
- was filed on May 25, 2000 as PCT International Application No.PCT/US00/14449 and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b), of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT international application designating at least one country other than the United States listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

<u>Number</u>	<u>Country</u>	<u>Date Filed</u>	<u>Priority Claimed</u>
_____	_____	Day/Mo/Year	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	Day/Mo/Year	<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under Title 35, United States Code Section 119(e) of any United States provisional application(s) listed below.

<u>Application No.</u>	<u>Filing Date</u>
60/136,603	May 27, 1999

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or Section 365(c) of any PCT international application designating the United States listed below, and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56, which became available between the filing date of the prior application and the national or PCT international filing date of this application.

<u>Application Number</u>	<u>Filing Date</u>	<u>Status: Patented/ Pending/Abandoned</u>
09/560,842	April 28, 2000	Currently Abandoned
PCT/US00/14449	May 25, 2000	Currently Expired

I hereby appoint the attorneys associated with Customer No. 000996 to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith. Address all correspondence and phone calls to:

John M. Janeway
GRAYBEAL JACKSON HALEY LLP
155 - 108th Avenue NE, Suite 350
Bellevue, WA 98004-5901 USA
Telephone (425) 455-5575
Facsimile (425) 455-1046

I hereby further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Robert Lee
Full Name of Inventor

United States
Citizenship

Residence/Post Office Address

Inventor's Signature

Date

Jeffrey T. Haley
Full Name of Inventor/ Post Office Address

United States
Citizenship

Residence/ Post Office Address

Inventor's Signature

Date

Angelina Ople
Full Name of Inventor

United States
Citizenship

Residence/ Post Office Address

Inventor's Signature

Date

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.